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NAME OF SUPERVISOR/*NOM DU DIRECTEUR DE THÈSE* DR. SHEILA WATSON

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THE UNIVERSITY OF ALBERTA

GEOMETRY IN *FINNEGANS WAKE*:
A STUDY OF REBIRTH, INSPIRATION, AND MAGIC

by

Ⓒ JAMES FRANCIS GILHOOLY

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
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DEPARTMENT ....ENGLISH........

EDMONTON, ALBERTA

FALL, 1976

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Geometry in *Finnegans Wake*: A Study of Rebirth, Inspiration, and Magic submitted by James Francis Gilhooly in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

Sheila Watson
Supervisor

Henry Kreisel

Wilfred Watson

Bernard Benstock
External Examiner

Date September 2, 1976.

For Catherine

The signs and shapes;
All those abstractions that you fancied were
From the great Treatise of Parmenides;
All, all those gyres and cubes and midnight things
Are but a new expression of her body
Drunk with the bitter sweetness of her youth.
And now my utmost mystery is out.
A woman's beauty is a storm-tossed banner;
Under it wisdom stands, and I alone---
Of all Arabia's lovers I alone---
Nor dazzled by the embroidery, nor lost
In the confusion of its night-dark folds,
Can hear the armed man speak.

--- W. B. Yeats

ABSTRACT

Chapter One outlines the chief argument of this study, that geometry and the Diagram in Finnegans Wake are central to an understanding of the pattern of H.C.E.'s fall and rise.

The publication of Finnegans Wake as a series of fine books is one indication that it is written in the tradition of the sacred book, as is shown in Chapter Two. Such a sacred book is The Book of Kells, an illuminated manuscript that is an important model for Finnegans Wake; the quincunx of Crucifixion in its so-called Tunc page is reversed by the Lozenge of Resurrection in Joyce's Diagram. Other reversals - rhetorical, linguistic, thematic, and structural - are explored as the context within which this geometrical reversal can be understood.

Chapter Three investigates the Diagram in its identity with the illustration for the First Proposition of Euclid's Elements, Book I. The most important editions of Euclid for Joyce are those of Casey and Todhunter. Justification for a symbolical reading of the geometry in Finnegans Wake is elicited from Dee, Bruno, Vico, Proclus, and Plato; Proclus is the link between Euclid and Plato.

The fall and rise of H.C.E. the freemasonic builder is considered in Chapter Four. The tower of Babel and the confusion of tongues are primary images of his fall, which is also related to a variation of original sin. Sin, however, is creative; the confusion of tongues becomes glossolalia. The freemasonic imagery in Finnegans Wake, which is reviewed in detail, adds to the constructive aspect of H.C.E.'s cycle. Freemasonry is identified with geometry by its adherents; two masonic

geometrical symbols in particular, the vesica piscis and Solomon's Seal, are relevant to Joyce's Diagram, by which the body-Temple of H.C.E. is reconstructed.

The agent of H.C.E.'s reconstruction is A.L.P., the "eternal geomater," or Earth Mother of geometry. The Diagram is her womb of rebirth and inspiration; the vesica piscis, the lozenge, and the triangle, all parts of the Diagram, are traditional female symbols. To indicate that A.L.P. has a higher, spiritual aspect, Joyce compares her to God, the Blessed Virgin Mary, Sophia, Plato's Necessity, and Isis; A.L.P.-Isis gathers the fragments of the dead H.C.E.-Osiris in her magical vessel of rebirth and inspiration and resurrects him. However, she is principally the Great Mother, goddess of sexuality and generation, death and life. H.C.E.'s clothing, of which there are generally seven articles, is a metaphor of the body in which A.L.P. dresses him. Seven is also the number of the cakras in tantrism, which is explored in detail. In both tantrism and Finnegans Wake, a goddess holds the power of life, geometry, and poetic inspiration. Throughout Joyce's writings, a woman is associated with the poet-figure. A.L.P. is the Muse of Finnegans Wake and the Great Memory without which poetry and rebirth cannot occur.

In Appendix B, various Gnostic doctrines and symbols, such as duality, the ingathering, and the fall and redemption through a woman, are compared to the themes and characters of Finnegans Wake.

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The support of the Canada Council was indispensable to the completion of this study. I would also like to thank the libraries and staffs of the following institutions, without whose assistance my work would have been impossible: the University of Toronto, the Toronto Public Library, the State University of New York at Buffalo, the Edmonton Public Library, the numerous libraries which allowed their books to be examined through interlibrary loan, and, above all, the University of Alberta.

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ABBREVIATIONS

The following abbreviations and short titles for Joyce's works conform to the usage of the *James Joyce Quarterly*. Publication details can be found in the Bibliography. In most cases, the editions which I employ throughout this study are those suggested by the *JJQ*; for a discussion of my reasons for using alternate texts, and of the critical work on the establishment of texts, see Appendix A.

AWN	*A Wake Newslitter* (periodical)
CW	*The Critical Writings of James Joyce*
Dubliners	*Dubliners*
Exiles	*Exiles*
FW	*Finnegans Wake*
GJ	*Giacomo Joyce*
JJ	*James Joyce*, by Richard Ellmann
JJQ	*James Joyce Quarterly* (periodical)
Letters	*Letters of James Joyce*
OED	*The Shorter Oxford English Dictionary on Historical Principles*
Portrait	*A Portrait of the Artist as a Young Man*
Repub.	*Republic*, by Plato (in *The Dialogues of Plato*, trans. Benjamin Jowett)
SH	*Stephen Hero*
Tim.	*Timaeus*, by Plato (in *The Dialogues of Plato*)
U	*Ulysses*

References to *Finnegans Wake* in the text and notes are generally in parentheses, by page and line number alone, according to the conventions established by Clive Hart in *A Concordance to 'Finnegans Wake'*. For instance, 283.32 refers to page 283, line 32. Occasionally, the letters *R*, *L*, and *F* will appear; these refer to the marginal comments on the right, left, and bottom, respectively, of pages 260-308. For instance, 303.L1 refers to the left-hand marginal comment on page 303. Citations of passages from *Finnegans Wake* which are not in parentheses are generally preceded by *FW*. References such as *FW*,II.2, or II.2, are to Book II, Chapter 2 of *Finnegans Wake*.

References to the texts of Joyce's other works are by abbreviated title and page number. For instance, *U*,37 refers to page 37 of *Ulysses*.

CHAPTER ONE - INTRODUCTION

Each reader of *Finnegans Wake* recreates it after his own limited image. There are several ways of classifying the work - as naturalistic novel, joke book, universal history and encyclopaedia, bible, transcript of a dream - and each is correct after a fashion. I find it fruitful to consider *Finnegans Wake* as the literal record of a mind dreaming, but this does not mean that the other classifications need be eliminated from consideration. For instance, the dream is a drama acted out by all "the charictures in the drame" (302.31-.32). Humour, principally in the form of the pun, is one of the common devices used by the dreaming mind: "for a night of thoughtsendyures and a day. As Great Shapesphere puns it." (295.03-.04) Joyce appears to have subscribed to the theory of the collective memory, as I argue in Chapter Five, so I find no contradiction in his portrayal of one mind dreaming all of human history in one night. And the dream is the source of all mythological and sacred utterances; Joyce's work is a "book of craven images" (563.04).

That *Finnegans Wake* is meant, among other things, as the record of a dream is evident from statements made by Joyce himself. Explaining the new language he found it necessary to invent in order adequately to describe his subject, he wrote in a letter that "one great part of every human existence is passed in a state which cannot be rendered sensible by the use of wideawake language, cutanddry grammar and goahead plot."[1] And in conversation with Arthur Power, he declared that "the difference between classical literature and modern literature is the difference between the objective and the subjective: classical literature represents the daylight of human personality while modern literature is concerned with the twilight, the passive rather than the active mind. We feel that the classicists explored the physical world to its limit, and we are now anxious to explore the hidden world, those undercurrents which flow beneath the apparently firm surface. . . . Our object is to create a new fusion between the exterior world and our contemporary selves, and also to enlarge our vocabulary of the subconscious as Proust has done."[2]

In common with some other critics of Finnegans Wake, I believe that the book is on one level the literal and realistic treatment of a single dreaming mind.[3] The theory of the single dreamer finds confirmation in Joyce's statement that his book was about "Finn lying dying by the river Liffey with the history of Ireland and the world circling through his mind."[4] Near the end of Finnegans Wake, as H.C.E. is about to arise from his dream, one of the characters asks, "You mean to see we have been hadding a sound night's sleep?" (597.01-.02). According to modern psychology, the ego is only one among other, lesser centres of mentation in the personality; in sleep, the ego is dormant, and the other centres are active. In Finnegans Wake, the dreamer is H.C.E., and the lesser centres of his personality that come alive are the characters that are known as the members of his family; this is precisely why the book speaks of "the map of the souls' groupography" (476.33). At the end of the book, the various centres of H.C.E.'s mind are reintegrated so that he may wake; as one character says, "We drames our dreams tell Bappy returns" (277.17-.18). Although Joyce had little patience with the ponderous and grave theories of psychoanalysis, it has been shown that he used them in his work, and the five members of the Earwicker family do bear some resemblance to the structures of the mind as conceived by Freud and Jung. H.C.E., who is otherwise Humpty Dumpty the egg, can be compared to the ego which dreams, Shaun to the superego or conscience, Shem to the id, Issy to the anima, and A.L.P. to the collective unconscious, which is personified as the archetype of the Great Mother. I am by no means suggesting that Joyce's book is a strict allegory of the psychoanalytic topology of mind; in both, however, the dreaming mind disintegrates into its constituents and is reunified when it awakes.

In the course of the present study, I shall have occasion to draw parallels between the psychoanalytic theory of the unconscious mind and various particulars of Joyce's work. However, my main concern is not to elucidate _Finnegans Wake_ as a dream or a Freudian parable. I am rather more interested in the pattern of the fall and rise of H.C.E., of his disintegration and reintegration, which, as I see it, is the essential "plot" of the book, and analogies with this plot, other than the psychoanalytic one, are easily located. According to the psychological theories current in Egypt around 3000 B.C., the human personality is again composed of many parts, which separate at death: the _ikhu_, or spark of intelligence, which returns to the gods; the _ba_, or bird-like soul, which flies around the grave; the _khaibit_, or shadow; and the _ka_, or double, which is born with a person and attends him in life and in death. If the judgement in the underworld is favourable, all of the constituents are reunited with the _sahu_, or mummy or soul, and the new man is resurrected and ushered into the presence of the eternal gods.[5] In _Finnegans Wake_, death and resurrection are metaphors for falling asleep and awaking. Joyce uses this word _sahu_ in describing the catasterism, or transposition to the stars, of the severed bodily parts of H.C.E. as Osiris: "Your heart is in the system of the Shewolf and your crested head is in the olatropic of Copricapron. Your feet are in the cloister of Virgo. Your olala is in the region of sahuls." (26.11-.14) In order that H.C.E. arise at the end of the book, these dispersed parts must be rejoined, and in Finnegans Wake, this task is accomplished by A.L.P. in the role of Isis. Like the Great Mother everywhere, A.L.P. gathers the limbs of H.C.E.-Osiris in her vessel of rebirth; this vessel is also her womb, the collective memory, and the Diagram on page 293 of Finnegans Wake.

The Isis and Osiris myth is only the most noticeable of several other analogies of dismemberment and rebirth which Joyce employs. Among the others are the Gnostic process of the ingathering of the particles of the divine light scattered throughout the darkness of the created world, which is accomplished by Sophia (see Appendix B); the tantric concept of the dissolution and creation of the cosmos by Kālī and Mahāmāyā (see Chapter Five); and the story of Humpty Dumpty, who, contrary to his fate in the original tale, is reunited in Finnegans Wake by "all the King's Hoarsers with all the Queen's Mum" (219.15-.16). In all three examples, it is a woman who is again the agent of reconciliation; as we shall see, woman is the dominant force in Finnegans Wake, as is apparent from the first line of the book, in which woman is given precedence over man in the words "past Eve and Adam's" (3.01).

The disintegration and reintegration of H.C.E. is also comparable to the composition of literature. Stephen Dedalus says in Ulysses that "As we, or mother Dana, weave and unweave our bodies . . . from day to day, their molecules shuttled to and fro, so does the artist weave and unweave his image" (U,194). In Finnegans Wake, A.L.P. is the source of poetic inspiration as well as of rebirth; as I show in Chapter Five, the vessel, the Letter, the river, clothing, and the Diagram are operative in both senses. The fragments that A.L.P. collects in her vessel are the bodily parts of H.C.E. and the clothing that is a metaphor for his body, but they are also the contents of the collective memory, without which there can be no literature and no Letter, which is Finnegans Wake itself.

The disintegration of H.C.E. the architect is also like the fall of the Tower of Babel and the consequent confusion of tongues. H.C.E. is himself the English language, and when he falls asleep, the etymological constituents of the language, which correspond to his bodily parts and to the family members of which he is composed, come alive. The reunification of languages in H.C.E.'s "multilingual tombstone" (392.24-.25) is synonymous with his resurrection. Again, A.L.P. is the power of separation and unification, and her vessel is the fountain of language and poetry (see Chapter Four).

H.C.E.-Osiris is also resurrected by the incantation of magic words, as in the ancient myth involving Horus and the hekau, or "words of power."[6] According to Ernst Cassirer, "the notion that name and essence bear a necessary and internal relation to each other, that the name does not merely denote but actually is the essence of its object; that the potency of the real thing is contained in the name - that is one of the fundamental assumptions of the mythmaking consciousness itself."[7] In his compelling study, James Joyce and the Cultic Use of Fiction, Kristian Smidt takes a position with which I am in complete agreement, that Joyce regards the use of poetic language as a magical act.[8] I would add that since Finnegans Wake is an exploration of the unconscious mind, Joyce uses magical language because the unconscious mind does so, as modern psychology has demonstrated.[9]

However, it is not only because the unconscious mind operates by magical principles that Joyce refers to magic in Finnegans Wake, for it was also a personal article of faith with him. From the early days in Dublin, surrounded by Yeats, A.E., and the theosophists, he was attracted to occultism.[10] In later years, he wore a ring forged of many metals as a talisman against blindness.[11] According to the contemporary witness of Frank Budgen, "Joyce is a superstitious man. He accepts the popular superstitions with regard to colours and stones and numbers."[12] Richard Ellmann, whose biography James Joyce bristles with examples of Joyce's belief in omens and coincidences, writes that Joyce "was forever trying to charm his life; his superstitions were attempts to impose sacramental importance upon naturalistic details. So too, his books were not to be taken as mere books, but as acts of prophecy. . . . For Joyce, life was charmed; nature was both stolid and magical, its ordinary details suffused with wonder, its wonderful manifestations permeated by the ordinary."[13] One example of an act of prophecy involves Stephen Dedalus' remark concerning Lynch in the "Circe" episode of Ulysses: "Exit Judas. Et laqueo se suspendit." (U,600; Joyce's emphasis) Later, the person upon whom Lynch is based, Vincent Cosgrave, drowned in the Thames.[14] There was occasionally, it seems, an element of malice in Joyce's satire, comparable to the magical satire of the ancient Irish fili, which could cause real physical harm to its victims.[15] But in the main, Joyce's works were an outlet for his own psychological problems.[16] As Clive Hart writes, "Joyce's works are all in the nature of self-purgations. Mr. Ellmann's detailed biography not only emphasized that everything in Joyce's books, down to the smallest matters of detail, is drawn directly from his personal experience, but has also revealed to what a remarkable extent these books are the expression of a sensibility haunted by emotional conflicts requiring the most powerful symbolic exorcism."[17] Joyce often judged the places he visited and the persons he encountered solely by the coincidences he detected in their names;[18] the title of Finnegans Wake itself, which was jealously hidden from even his friends while it was being written, was endowed by its author with an occult potency.[19] Like L. A. G. Strong, I believe that in his works "Joyce was wielding magic; he was invoking mighty names; he was contemplating archetypal symbols, and using words of power."[20] Joyce bears more than a passing resemblance to the hero of "A Portrait of the Artist" (1904), the first version of A Portrait of the Artist as a Young Man, who derives his poetic inspiration from magic after leaving the Church: "Joachim Abbas, Bruno the Nolan, Michael Sendivogius, all the hierarchs of initiation cast their spells upon him. He descended among the hells of Swedenborg and abased himself in the gloom of Saint John of the Cross. His heaven was suddenly illuminated by a horde of stars, the signatures of all nature, the soul remembering ancient days. Like an alchemist he bent upon his handiwork, bringing together the mysterious elements, separating the subtle from the gross."[21]

As Skeat has shown, there is an etymological reason for connecting language and magic; the words gramarye ("magic"), glamour ("magic"), and grammar are closely related.[22] A question upon which I have done considerable research, but which has had to be excluded from the present study, is Joyce's interest in divination. In Finnegans Wake, Joyce magically examines the entrails of language, that is, its etymology, in order to divine the total pattern of the dream and of history.[23] Vico thought that the "ideal human history" could be reconstructed through an examination of language and etymology, and Finnegans Wake is the fulfilment of his project. The principles whereby Vico proceeds are a far cry from the methodical footing upon which Skeat and others established the science. For instance, he compares Fr. loi ("law") to Fr. aloi ("money"), and L. ius ("law") to "the fat of sacrificial animals, which was Jove's due; for Jove was originally called Ious, from which were later derived the genitives Iovis and iuris" (The New Science,433).[24] Vico's method may strike one as rather curious, for it is apparent that his analysis is based not on etymology as we know it, but on the puns so beloved by Joyce. Vico's method receives confirmation in the writings of Ernst Cassirer, who declares that "all linguistic denotation is essentially ambiguous - and in this ambiguity, this 'paronymia' of words lies the source of all myths. The examples by which Max Müller supports this theory are characteristic of his approach."[25] In Chapter Two of the present study, I show that Joyce uses as part of his patterns of reversal the ambivalent primal words that Abel and Freud spoke of, and the pun is precisely the rhetorical counterpart of the tendency to ambivalence in the unconscious mind.

The pun also answers to the reconciliation of opposites that must occur before H.C.E. can be resurrected, and his sons Shem and Shaun are those opposites. This reconciliation is never anything more than temporary, although it does, indeed, occur; Joyce's dualism is Manichaean in character, as I show in Appendix B, "Gnosticism in Finnegans Wake." A.L.P. is the agent of the reconciliation of opposites, like the Great Mother everywhere. As the Prankquean (21.05-23.15), she switches the twins, who repeat this switch by exchanging margins at the Diagram, A.L.P.'s emblem. That A.L.P. unites the opposites can be seen clearly at FW,614.27-615.10, in which the "wholemole millwheeling vicociclometer . . . receives through a portal vein the dialytically separated elements of precedent decomposition for the verypetpurpose of subsequent recombination so that the heroticisms, catastrophes and eccentricities transmitted by the ancient legacy of the past . . . may be there."

The primary concern of the present work is to demonstrate how the Diagram on page 293 of Finnegans Wake fits into the pattern of disintegration and reintegration which I have just delineated. This Diagram is, with the exception of the dotted lines AP and LP (see Figure 1), identical to the illustration given for the First Proposition of Euclid's Elements, Book I.

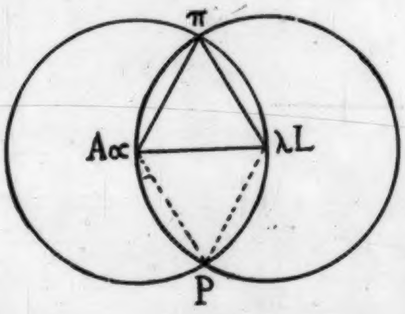


Fig.1. The Diagram in Finnegans Wake,293.

According to Isaac Todhunter's edition of the Elements, which, as I show in Chapter Three, was one of the editions which Joyce knew, the object of the First Proposition is "to describe an equilateral triangle on a given finite straight line." Adapting Todhunter's lettering to Joyce's Diagram, the method of construction is as follows. The given straight line is $\alpha\lambda$. With centre α and radius $\alpha\lambda$, a circle is described. With centre λ and radius $\alpha\lambda$, another circle is described. From the point π, at which the circles cut one another, the straight lines $\pi\alpha$ and $\pi\lambda$ are drawn. Then $\alpha\lambda\pi$ is an equilateral triangle.[26] By connecting points AP and LP with dotted lines, a second triangle ALP is formed. The reader is advised to fix the Diagram firmly in mind, for I shall refer to it again and again in the course of this study.

As with anything in Finnegans Wake it is dangerous to generalize, but I believe that in the case of the Diagram I am in a position to state certain conclusions. First of all, the upper triangle $\alpha\lambda\pi$ in the Diagram stands for H.C.E., and the lower triangle ALP stands for A.L.P. This is by no means immediately apparent, and I cannot recall this observation having been made before this. Joyce draws a parallel between his Diagram and Solomon's Seal (297.03-.04), which confirms his typology; as I show in Chapter Four, the upper triangle in Solomon's Seal is male as well, and the lower one is female. The question of why Joyce adds the dotted lower triangle ALP to Euclid's original illustration puzzled me for some time, until I came to explore some of the other analogies he makes with his Diagram. The death and resurrection of H.C.E. is in one sense alchemical. Joyce alludes to the second statement from the Smaragdine Tablets, an ancient set of instructions for making the philosophers' stone; this statement reads: "what is below is like that which is above, and what is above is like that which is below, to accomplish the miracles of one thing."[27] Joyce gives only the second half of this at one place in Finnegans Wake: "The tasks above are as the flasks below, saith the emerald canticle of Hermes and all's loth and pleasestir." (263.21-.23) The "flasks" are A.L.P.'s ("all's loth and pleasestir") vessel of rebirth, in which H.C.E. ("emerald canticle of Hermes"), that which is above, is produced; however, that which is below is also the triangle ALP, which is A.L.P., and that which is above is also the triangle αλπ, which is H.C.E. By omitting the first half of the alchemical statement, Joyce is saying that the male principle (upper triangle) rises out of the female principle (lower triangle), but not vice versa. The dotted lines in the Diagram indicate the presence of the triangle that was once there, but which has now been raised up to form the upper triangle.

The point P in the Diagram, as the text says, stands for "Pride down there on the batom where Hoddum and Heave, our monsterbilker, balked his bawd of parodies" (296.05-.07). That is to say, when H.C.E. as the masterbuilder ("monsterbilker") or architect falls from his tower through pride and original sin, the lower triangle, with its lowest point P, is outlined. When H.C.E. is raised up again, he is elevated to the triangle αλπ, for the passage continues, "mick your modest mock Pie . . . Where your apexojesus will be a point of order" (296.08-.11), and this names the point π, the apex of the upper triangle, where Jesus resurrects and redeems the sin of Adam and Eve. Shaun's marginal comment on this passage is "*Zweispaltung as Fundemaintalish of Wiederherstellung*" (296.L1; Joyce's emphasis); this states that the division into two (Ger. *zwei*, "two," and *Spaltung*, "fissure, division, schism"), that is, the twins Shem and Shaun, is the foundation of restoration (Ger. *Wiederherstellung*). Without sin, there can be no redemption (the *felix culpa*); without death, there can be no life. The universe of *Finnegans Wake* is informed by the eternal interplay of opposites. In the Diagram, these opposites are the two triangles, male and female, but they are also the two circles, Shem and Shaun, by which the triangle αλπ is produced.

When Shem and Shaun are associated with the upper triangle, they are the sides $\alpha\pi$ and $\lambda\pi$; to complete the correspondence of the family to the Diagram, A.L.P. and Issy are the sides AP and LP, and H.C.E. is $\alpha\lambda$/AL. As "larrons o'toolers clittering up and tombles a'buckets clottering down" (5.03-.04), Shaun and Shem construct H.C.E.'s tower. The same two characters later appear climbing up A.L.P.'s "cartwheel chapot" (59.06), and this hat (Fr. *chapeau*) is still later associated with the upper triangle upon which Burrus and Caseous (Shaun and Shem) are ascending (165.21-.24). It can be concluded from this sequence of passages, as I show in more detail in Chapter Five, that the construction of H.C.E. and his tower is accomplished through the Diagram. In the Burrus and Caseous episode, the character Antonius (H.C.E.) joins his sons Burrus and Caseous, and through alchemy, the "*A*ntonius-*B*urrus-*C*aseous grouptriad" (167.04; my emphasis) is formed, that is, the upper triangle in the Diagram, which is normally labelled ABC in the illustrations to Euclid's First Proposition (see Figure 4, *infra*); when Burrus and Caseous ascend the triangle $\alpha\lambda\pi$, H.C.E. is resurrected. The ascent of the sons on the triangle (which is also the Holy Trinity; see 286.21-.24) is tantamount to the reconciliation of opposites that must occur before H.C.E. can be reborn. The Diagram itself is the primary emblem of such reconciliation; in this role, it is associated with the rainbow, A.L.P.'s vessel, and the squared circle (for the last, see Chapter Three). Two other important geometrical symbols of reconciliation, both of which are connected with the Diagram, are Solomon's Seal, especially as it is considered to be the union of fire and water, and the *vesica piscis*, which is the figure formed by the intersection of the two circles in the Diagram. The last two figures are also used by Joyce in the freemasonic sense of raising the Temple, which reverses the fall from the tower and restores H.C.E., and again, the raising of the Temple is accomplished through the Diagram. In freemasonry, as we shall see in Chapter Four, the equilateral triangle and Euclid's First Proposition are related to the Logos and the creation of the lodge (universe).

Shem and Shaun are also the two circles in the Diagram; among other things, these are two eyes, or two different ways of perceiving reality (see 298.14-.18). Joyce equates the circles with the Same and the Other described in Plato's Timaeus; Plato defines these as the principles of unity and diversity, respectively, by which the Nous creates the universe, and they correspond to the fixed stars and the seven planets, which are variable in their orbits. In Finnegans Wake, Patrick and Berkeley (Shaun and Shem) are equated with the Same and the Other; Patrick argues that light is unified in nature, while Berkeley thinks it is sevenfold (see 611.04-612.36). Since Plato is speaking of the creation of the universe and of man, the microcosm, when he posits the Same and the Other, it can be concluded that Joyce's Diagram is also connected with creation; elsewhere, Plato says that the elements are generated from triangles. But why does Joyce associate the Same and the Other specifically with Euclid's First Proposition? I believe I have found the connecting link in A Commentary on the First Book of Euclid's Elements by Proclus (A.D. 410?-485), the last successor of the Platonic Academy. According to Proclus, Euclid's Elements is a Platonic allegory. In the First Proposition, he says, the triangle within the two circles is a metaphor of the manner in which created objects are generated from the First Cause; the twofold Nous acts through the Same and the Other. The circle is the image of intelligible being, and the triangle is the image of the first soul. In Finnegans Wake, the circles Shem and Shaun are the instruments of A.L.P., who produces through them the triangle αλπ, that is, H.C.E. Proclus says that the circle is superior to the straight line; Joyce associates the circle with A.L.P. and the straight line with H.C.E. (see "Ainsoph, this upright one, with that noughty besighed him zeroine," 261.23-.24). Proclus uses the triangle as a metaphor of the three parts of the soul; H.C.E. is also composed of three parts (see Chapter Three).

As a triangle, H.C.E. is formed after the image of A.L.P., for the Diagram is first and foremost the emblem of A.L.P.'s powers of life and sexual fecundity, as I demonstrate in Chapter Five; it is identical with her sexual organs, which are completely exposed to her children. The various components of the Diagram, the *vesica piscis*, the rhombus or lozenge, and the triangle itself are traditional symbols of the female genitals and the female principle of life. A.L.P. is also the river of life, and it is possible that the central text in *FW*,II.2 is a river flowing from her womb, the Diagram, and that the marginal comments of Shem and Shaun are the banks of the river.

As I show in Chapter Two, the lozenge in Joyce's Diagram is meant as a reversal of the quincunx in the *Tunc* page of *The Book of Kells*. Since the *Tunc* page portrays the Crucifixion of Jesus Christ, the reverse of this must be life, which is precisely what is bestowed in the "Cunt" page of *Finnegans Wake*. Much of Chapter Two is concerned with demonstrating Joyce's involvement with *The Book of Kells*, in order to set within its context my thesis that a geometrical reversal occurs; I also show that Joyce was writing within the tradition of the sacred book, of which *The Book of Kells* is the most important specimen. The latter part of Chapter Two draws out the other patterns of reversal in

Finnegans Wake, rhetorical, linguistic, thematic, and structural, in order to show that the reversal of the *Tunc* page in the Diagram is not an isolated circumstance, but is central to the theme of opposites and their reconciliation. The Christianity glorified in *The Book of Kells* is a religion of antisexuality and death, according to Joyce; the phallic serpents which are imprisoned by the knots and lines in the *Tunc* page represent Druidism and life and are released in Joyce's Diagram in order to infuse H.C.E. with new life. There is another important serpent for Joyce's purposes, and that is the serpent *kuṇḍalinī* worshipped in the Indian religious movement known as tantrism; as I show in Chapter Five, the release of this serpent results in the resurrection of the dormant male principle and poetic inspiration, and the agent of resurrection is the Goddess Śakti, who is another analogue for A.L.P.

The Diagram is a *maṇḍala* or organizing principle around which the new personality of H.C.E. is constructed. Since H.C.E. is the Letter and *Finnegans Wake* itself, it can be concluded that the Diagram is the organizing principle of the entire book; unfortunately, I am in no position to demonstrate this organization in any detail. Clive Hart suggests that Joyce probably had several "quasi-geometrical schemes of dream-correspondences in writing *Finnegans Wake*," in the same way that he did for his other works, and his excellent study, *Structure and Motif in 'Finnegans Wake'*, attempts to outline the cyclical and other structures of the book; he states that *Finnegans Wake* is a *maṇḍala* in the shape ⊕, which is the sign Joyce used to refer to Question 9 in *FW*,I.6 (143.03-.28).[28] If *Finnegans Wake* is realism of the unconscious mind, as I have suggested, it is not surprising that Joyce uses a geometrical figure as an organizing principle for the personality of his main character and for the dream itself. According to Carl Jung, the existence of the archetype of wholeness or of the self in the human personality is proved by the constant recurrence of certain symbols in dreams and visions; "the most important of these are geometrical structures containing elements of the circle and quaternity; namely, circular and spherical forms on the one hand, which can be represented either purely geometrically or as objects; and, on the other hand, quadratic figures divided into four or in the form of a cross."[29] The geometrical figures Jung describes are identical with Joyce's sign for his Question 9. In other places, Jung equates a related figure, the squared circle, with the archetype of the self and the reconciliation of opposites; as I show in Chapter Three, Joyce associates the squared circle with his own Diagram, which reconciles opposites and unifies the personality of H.C.E. Jung is not the only relevant authority who uses geometry as a metaphor for mental processes. Giordano Bruno, a philosopher who exerted an abiding influence on Joyce, conceived human thought as geometric. Commenting on the Timaeus (35-36), Proclus says that "all mathematicals are thus present in the soul from the first."[30] Indisputable proof that Joyce defines mathematics as the basis of the human personality in Finnegans Wake is apparent from the following passage: "egotum sabcunsciously senses upers the deprofundity of multimathematical immaterialities wherebejubers in the pancosmic urge the allimmanence of that which Itself is Itself Alone (hear, O hear, Caller Errin!) exteriorises on this ourherenow plane in disunited solod . . . intuitions of reunited selfdom . . . in the higherdimissional selfless Allself." (394.30-395.02; note H.C.E.'s initials in the parentheses)

I have said that A.L.P. the "eternal geomater" (296.31-297.01), or mother of geometry, is the source of both rebirth and poetic inspiration.

The connection between geometry and language is forged in the Greek word στοιχεῖα, which means both the elements of geometry and the letters of the alphabet; Joyce shows his awareness of this dual meaning in "elementator joyclid" (302.12), in which he equates himself with Euclid, the master of the *Elements*. According to Giambattista Vico, geometry stimulates the imagination and memory and leads to the production of "poetical figments" (*mendacia poetica*); in the words of Antonio Corsano, to Vico's way of thinking, "the fictitious, that is, the artificial and artful character of the primary geometrical concepts, bears a kinship to the nature of poetical figments."[31] Bruno also thought that geometrical figures stimulate the imagination, although his object was not the writing of poetry, but the invocation of magical powers; I would maintain that in the universe of *Finnegans Wake* there is little difference between poetry and magic. Bruno's insight finds corroboration in primitive geometrical art, the purpose of which was to capture spirits.

Proclus dutifully repeats the Platonic idea that mathematics and geometry lead to realization of the Ideas, and in the *Republic* (525), Plato himself says that geometry brings "knowledge of the eternal, and not of aught perishing and transient."[32] In both the *Meno* (82-86) and the *Phaedo* (73), geometry is employed to demonstrate the previous existence of the Ideas in the soul. For the present purposes, the Platonic Ideas can be identified with the collective memory, which is A.L.P. in *Finnegans Wake*; through geometry and the Diagram, the poet is filled with the inspiration of the collective memory. Furthermore, geometry in *Finnegans Wake* is the instrument of the realization of higher consciousness, as in Plato. A like symbolism obtains in tantrism; *yantra* is the name of a geometrical figure used to concentrate psychic forces, stimulate imagination, arouse the Goddess, and lead to transcendent consciousness; like A.L.P., this Goddess is also connected with poetic inspiration. The resurrection of H.C.E. is in some senses a spiritual realization, and, as I show, Joyce uses the language of yoga, alchemy, and Gnosticism to describe this transcendence.

There have been several attempts by critics to treat various aspects of Joyce's use of geometry. One of the best articles is Fritz Senn's "The Aliments of Jumeantry," which considers in fine detail the role of Euclid's First Proposition in Finnegans Wake. Diane Thompson and Paul Thompson ("A Geometry Problem in Finnegans Wake") argue that a second geometry problem, requiring a second Diagram, is described at FW,283.30-284.04; Clive Hart ("The Geometry Problem [283.30]") enlarges on this idea; and Danis Rose ("Ad Maturing Daily Glory Aims [282.6]") adds a few other remarks. In Chapter Three, I give my reasons for disagreement with this approach and my own interpretation of the same passage. Petr Skrabanek ("Imaginable Itinerary Through The Particular Universal [260.R3]") interprets FW,260.08-.15 as the description of a tour around Dublin and the Diagram via the North Circular Road. In another article ("O Quanta Virtus Est Intersecationibus Circulorum"), Skrabanek maintains that Joyce's Diagram is indebted to a certain figure in Bruno; as I show in Chapter Three, Joyce does, indeed, use Bruno's geometrical figures, but not the one Skrabanek proposes as an analogue. In Eternal Geomater: The Sexual Universe of 'Finnegans Wake', Margaret C. Solomon variously invents geometrical figures other than the one Joyce supplies on page 293; I am in agreement with few of her observations in this connection, for it is my contention that the Diagram as given should be sufficient to account for the geometrical imagery in the text. As I have mentioned, Clive Hart sees the structure of the book in geometrical terms in his Structure and Motif in 'Finnegans Wake', but he does not relate it in any consistent way to the Diagram.

The symbolism of the vesica piscis in Finnegans Wake receives passing attention from Adaline Glasheen ("Re 293, the Geometrical Figure") and Leo Knuth ("Almonds and Keys"); as I demonstrate in Chapters Four and Five, the significance of this figure is greater than either suspects. In The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake', James S. Atherton draws attention to the parallel between the Tunc page of The Book of Kells and Joyce's Diagram, but his remarks do not extend, as do mine, to a consideration of the reversal of the Tunc quincunx by the lozenge in the Diagram.[33] Lewis Phillips ("How to Teach Geometry and Theology Simultaneously") relates "apexojesus" (296.10) to the Diagram. H. D. Rankin ("Joyce's Remove from Aristotle to Plato"), in the course of a discussion of Plato in Finnegans Wake, considers the divided line in the Republic in relation to FW,292.30-.32; A. M. Ritchie ("Awake at the Wake, or How to Tell When Not Seeing What is Not is Seeing What Is") replies. Richard Motycka ("A Little Night Lesson: Viconian Structure in FW II.2") proposes that the Diagram is "an epistemological device for bringing archetypal memories to the surface,"[34] and this is a position with which I am in essential agreement.

The geometrical term "gnomon," which Joyce uses in the first paragraph of "The Sisters" (Dubliners,9), has aroused considerable critical interest. The consensus, with a few exceptions, is that the word implies incompleteness; Thomas E. Connolly's article, "Joyce's 'The Sisters': A Pennyworth of Snuff," is representative of this interpretation. In Chapter Three, I argue that "gnomon" is rather an image of what is added to something else; in the case of "The Sisters," the boy's imagination is what is added to the paralysed world in which he finds himself.

Throughout this study, I recur to the works of W. B. Yeats, in particular to *A Vision*, in which geometrical figures are images of different states of consciousness. In *Reading 'Finnegans Wake'* and *Hermes to his Son Thoth: Being Joyce's Use of Giordano Bruno in 'Finnegans Wake'*, Frances M. Boldereff argues, as others have done, that Joyce's Diagram is closely related to Yeats's gyres.[35] In *Yeats and Joyce* and *Eminent Domain: Yeats among Wilde, Joyce, Pound, Eliot, and Auden*, Richard Ellmann sees little resemblance between them.[36] In Chapter Two, I give my reasons for believing that the Diagram is, in fact, indebted to Yeats, as is *Finnegans Wake* in general. Joyce once regretted that Yeats did not use the insights expressed in *A Vision* in a creative work; I think he tried to make up for this supposed deficiency by freely using Yeats's insights in *Finnegans Wake*.

Despite what must seem like a considerable body of critical material, mine is, I believe, the first extended study of geometry in *Finnegans Wake*. My approach to the book might, like Stephen Dedalus' theory of Shakespeare, be characterized as "theolologicophilolological" (*U*,205), that is, as a rather mixed approach. In many cases I have been able to ascertain Joyce's exact or probable sources. Some textual analysis is unavoidable if any sort of continuous argument is to be carried on; I rarely carry such analysis to finality, supposing that such a task were possible. I believe that it is standard practice in Joyce studies to be guided by the principle that if words are in close proximity and have a thematic, symbolic, or other connection, they need not have a syntactical one. Overreading is endemic in the published criticism, and I have tried to limit my own tendencies in this direction by always demanding a supportive context. The reader will find that I also analyse certain aspects of Finnegans Wake according to symbolism and typology, and this is particularly so with respect to the freemasonic and feminine symbolism of the Diagram; where Joyce's exact sources have not been established, I believe that it is valid to appeal to the collective symbolism of the race. I am indebted to certain insights of psychoanalysis, but in no case do I impose its naive allegories upon Joyce. I might direct the reader's attention to the footnotes and bibliography, which contain significant surveys of the Joyce criticism and of other relevant material, especially with regard to Joyce's interest in magic and related ideas.

I doubt if Finnegans Wake will ever be completely comprehended, even if source studies manage to uncover every last allusion in the book. As has been remarked several times, the work is to a large extent music and is, by nature, impervious to critical analysis. Finnegans Wake is moreover a grimoire of magical spells intended to work on the unconscious portions of the reader's mind, like all great poetry; to explicate is to destroy. Given the residue of uncertainty, I believe that it is extremely dangerous to make any generalizations about the book; paraphrase of literature is always a falsification, but this is particularly so with Finnegans Wake, because the unconscious states which it imitates can only be invoked through the language which Joyce has invented. I have made certain generalizations throughout the present study (and most of these have been summarized in the present chapter), but only when I thought that they were beyond dispute.

A study of the geometry in Finnegans Wake will, I believe, provide the key to the book's hidden structure. While the remains of the plan

Joyce used in constructing Ulysses, namely Homer's Odyssey, are still visible in the final text, the plan of Finnegans Wake has receded into the exuberant exfoliation of language bursting its limits. Such a plan must still be operative in the book, exerting its magnetic pull upon the surface lines of the words of the text in the way a magnet aligns iron filings along the lines of force. The Diagram, I would think, is precisely that plan, but how it operates in detail I have only begun to understand. Joyce was obsessed with organization, and it is inconceivable that he would proceed in writing Finnegans Wake without a rigourous scheme. In the end, as in the beginning, he wished to impose order on chaos; like Stephen Dedalus in Stephen Hero (33), "over all this chaos of history and legend, of fact and supposition, he strove to draw out a line of order, to reduce the abysses of the past to order by a diagram."

CHAPTER TWO - "THE DOATERS OF INVERSION": REVERSAL AND THE SACRED BOOK

The sacred book in Joyce and his predecessors

In *A Portrait of the Artist as a Young Man*, Stephen Dedalus proclaims himself "a priest of eternal imagination transmuting the daily bread of experience into the radiant body of everliving life" (*Portrait*,221) and an augur divining the flight of birds according to the magical principles of Agrippa and Swedenborg (*Portrait*,224). Stephen the magus and the aesthete is a late flower of the French Decadence, which declared Art a religion and the Artist its priest and drew upon occultism for its inspiration and material. Sâr Péladan's "Exhortation" to *L'Art idéaliste et mystique: doctrine de l'ordre et du salon annuel des Rose ✠ Croix* (1894) is representative of the Decadent view: "Artiste, tu es prêtre: l'Art est le grand mystère et, lorsque ton effort aboutit au chef-d'oeuvre, un rayon du divin descend comme sur un autel. O présence réele de la divinité resplendissante sous ces noms suprêmes: Vinci, Raphaël, Michel-Ange, Beethoven et Wagner. . . . Artiste, tu est mage: l'Art est le grand miracle, il prouve seul notre immortalité."[1] The capitalized "Artist" of Joyce's title is the very word which the alchemist-priest, Baudelaire for instance, used in reference to himself. Like Stephen, the Artist conceives his Art to be sacramental, but rather than to God, it is to himself that he dedicates it; Joyce himself wrote on the first page of his early play *A Brilliant Career* (1900): "To My own Soul I dedicate the first true work of my life."[2] The Artist aims to become God by his own artistic and magical powers.[3] It is such a certainty in his own potency which moves Stephen to compare his ideal Artist to the God who absents Himself from His creation (Portrait,215).

The central doctrine of Joyce's religion of art is the belief in the primitive, magical power of the Word, which is the object which it is said to represent; incantation of the Word evokes the real presence of the object. The sacred book which embodies this doctrine is Finnegans Wake. A remark that Joyce is reputed to have made to Eugene Jolas is evidence of his belief in his own literary omnipotence: "I have discovered that I can do anything with language I want."[4] Finnegans Wake itself is self-conscious of its own merits; in my opinion, the constant references to sacred books should be taken as self-assessments. Issy whispers of "our secret stripture" (293.F2). The tavern-keeper stutters the litany, "Packen paper paineth whomto is sacred scriptured sign" (356.24-.25). H.C.E. is revealed "in various phases of scripture as in various poses of sepulture" (254.27-.28). And Jerry the poet has a "book of craven images" (563.04).

Several critics of Finnegans Wake have been receptive to the notion that it is to be treated as a sacred book. Concluding his discussion of the four forms of prose fiction (novel, confession, anatomy, and romance), Northrop Frye remarks that these forms "vanish in Finnegans Wake into a fifth and quintessential form. This form is the one traditionally associated with scriptures and sacred books, and treats life in terms of the fall and awakening of the human soul and the creation and apocalypse of nature. The Bible is the definitive example of it; the Egyptian Book of the Dead and the Icelandic Prose Edda, both of which have left deep imprints on Finnegans Wake, also belong to it."[5] According to James Atherton, Joyce "saw himself as the Vates, the poet and prophet, and his work as the sacred book of a new religion of which he was the prophet and priest."[6] Like Frye, Atherton thinks that "Joyce aimed at fusing all religions and their sacred texts together in his book," which was to become a Third Scripture, "the sacred book of the night."[7] The first two Scriptures were the Bible and the Book of Nature,[8] and it is the latter, one imagines, that "the Author of Nature"[9] (357.28) composes in _Finnegans Wake_; earlier, Stephen Dedalus had varied the image when he spoke of "The playwright who wrote the folio of this world and wrote it badly (He gave us light first and the sun two days later)" (_U_,213). Bernard Benstock's belief is, again, that Joyce's objective was to transcend the older bibles.[10] The authors of _A Skeleton Key to 'Finnegans Wake'_, Joseph Campbell and Henry Morton Robinson, are less subdued in their assessment of _Finnegans Wake_ as "fellow to the Puranas of the Hindus, the Egyptian Book of the Dead, the Apocalyptic writings of the Persians and the Jews, the scaldic Poetic Edda, and the mystical constructions of the Master Singers of the ancient Celts."[11]

The book is raised to sacred status in many cultures and religions.[12] At the close of the classical age, the works of Homer were venerated, especially by the Neoplatonists, as sacred books, but it was only with the rise of Christianity, "a religion of the Holy Book," that the book "received its highest consecration."[13] According to Spengler, every Magian religion coalesces around "the sacred book in which it has become visibly evident, in which it has been captured by the spell of a sacred script."[14]

In Islam, the Koran (_Al Kitab_, "The Book") is one of Allah's essential attributes, and not merely one of His creations. In the thirteenth Sura (Koran 13:39), it is written that the Mother of the Book in heaven is the authentic Koran and that the one known on this earth is its copy only. Joyce invokes this heavenly archetype in Finnegans Wake, in which A.L.P. the eternal feminine continuously renews H.C.E. and the book: "the mother of the book with a dustwhisk tabularasing his obliteration done upon her involucrum." (50.11-.13) "To each age its Book," states the Koran (13:38);[15] Finnegans Wake declares itself the Book of its own age and accepts the challenge thrown out in the Koran (10:38) that it can only be divine, since no human could possibly write such a superhuman book.[16]

The civilization nourished by Islam developed to the highest excellence the arts of calligraphy, the most noble purpose of which is to transcribe the Koran. Islam naturally turned to illumination of the Book because the religious code prohibited literal representation as idolatrous; one authority states that "the entire artistic impulse came to be expressed in the creation of a beautiful script, and its ornamentation by means of fine arabesque patterns."[17] As we shall see, Joyce's concern with the sacred book manifested itself in an interest in the illumination of manuscripts and books, in particular, The Book of Kells.

In June 1904, the Irish literary world is still awaiting the book that will allow it to forget Shakespeare: "Our young Irish bards . . . have yet to create a figure which the world will set beside Saxon Shakespeare's Hamlet." (U,185) In the National Library on the sixteenth day of the month, an obscure young dialectician, Stephen Dedalus, vainly attempts to wrest the palm of beauty from the grasp of its usurpers. During an interruption in the exposition of his Hamlet theory, he bears silent witness to the literary chat of a circle from which he is excluded. Though he bears an ashplant, the emblem of bardic office, he alone of the company is uninvited to Moore's "evening."[18] A.E. is said to be assembling a sheaf of the "younger poets' verses" (U,192),[19] but he has neglected to ask a poem of Stephen, the druid who prophesies by oneiromancy the coming day's events and his encounter with Bloom: "Last night I flew. Easily flew. Men wondered. Street of harlots after. A creamfruit melon he held to me. In. You will see." (U,217)[20] Someone observes, "Our national epic has yet to be written, Dr Sigerson says. Moore is the man for it" (U,192);[21] the possibility that a dark horse like Stephen Dedalus or James Joyce will write a book like Ulysses troubles no mind. Apparently, Joyce was satisfied at the time of Moore's death in 1933 that his rival had not succeeded in writing the national epic, for he ordered a wreath for Moore's funeral, with specific instructions that no ivy be included; Joyce was disappointed when his gesture of repudiation went unreported in the newspapers.[22]

Writing Ireland's national epic himself was clearly Joyce's ambition. Those who maintain he achieved it include Joyce himself, who, in reply to the question, "whom do you consider the greatest writer in English today," answered, "aside from myself, I don't know."[23] Undoubtedly echoing what she had heard from her husband, Nora Joyce once boasted, "there's only one man he has to beat now, and that's that Shakespeare."[24] Joyce was by no means alone in his ambition. The older figures of the Irish Renaissance exhibited an obsession to write the sacred book prefiguring the advent of the new national leader. As Herbert Howarth has demonstrated, Yeats, Shaw, T. E. Lawrence, and A.E. all saw themselves as the one writer destined to become the instrument of history, and the competition was not without its rancours.[25]

In the Scribbledehobble notebook for 1923, Joyce made the following entry: "AE Lurgan (Armagh) 1867 Aet 56, WBY 58 GBS 67. GM 71. (1923)." Thomas Connolly, the editor of the notebook, advances the case that Joyce jotted down the ages of Russell, Yeats, Shaw, and Moore, all past fifty, because being only forty-one, he felt "an overwhelming sense of isolation."[26] I should think his mood would rather be one of elation, in the expectation that he would outlive his rivals and gain the opportunity to deliver the last word.

The concern with ages finds its way into Ulysses. Stephen Dedalus knows the important dates in Shakespeare's life as if it were his own.[27] In "Ithaca," the answer to the catechetical question, "What relation existed between their ages?" is a dizzying burlesque on the difference between the ages of Stephen and Bloom (U,679). Two solutions to the problem are proposed, one real, the other imaginary. In the first, the chronological ages of the two advance as they normally would through the years, the "proportion increasing and the disparity diminishing." In the second, it is imagined that the ratio between the ages that existed in 1883 (seventeen-to-one) is maintained through the years; the result is that Bloom must age seventeen times as fast as Stephen, and the year of his birth consequently recedes further and further into the past. In the former solution, the Father and the Son approach consubstantiality as the difference in age approaches zero; in the latter, the gulf between them becomes infinite as the difference in ages approaches infinity (notice that the seventeen-to-one ratio is not strictly maintained, but actually increases asymptotically).[28]

From the figures supplied in the previous example, one can deduce that in 1902, Stephen was twenty and Bloom was thirty-six. What no critic seems to have noticed is that in that year, James Joyce (b. 2 February

1882) was also twenty, while William Butler Yeats (b. 13 June 1865), like Bloom, was thirty-six turning thirty-seven. Furthermore, 1902 (August) was the year in which Joyce embarrassed Yeats over his age; Ellmann relates the encounter as follows: "Joyce rose to go and delivered his parting shot: 'I am twenty. How old are you?' Yeats had turned thirty-seven three months before, but replied, 'Thirty-six,' realizing afterwards both his mistake and the reason for it. Joyce said with a sigh, as Yeats remembered, 'I thought as much. I have met you too late. You are too old.'"[29] Joyce recalls the retort several times in Finnegans Wake, for example, when he writes, "I have met with you, bird, too late, or if not, too worm and early" (37.13-.14; see also 60.29, 155.12, 245.22(?), 345.13, 408.16[30]). Incidentally, it is also a curious coincidence that the Dublin Hermetic Society, of which Yeats and Russell were founding members, met for the first time on 16 June 1885 (Bloomsday), when Yeats, like Stephen in 1902, was twenty.[31]

Are we to conclude that Bloom is Yeats? Of course not, no more than we can take the associations established with other persons, real or not, to mean that Bloom is exclusively Odysseus, Teodoro Mayer, Ettore Schmitz, Mr. Hunter, or James Joyce himself.[32] When he holds the drunken Stephen, who mumbles a few words from "Who Goes with Fergus?" (1899), Bloom does not recognize Yeats's poem at all and gropes to piece together Stephen's words: "In the shady wood. The deep white breast. Ferguson, I think I caught." (U,609) If Bloom were Yeats, he would have no such difficulty. Nevertheless, one should keep in mind Lenehan's judgement that there's "a touch of the artist about old Bloom" (U,235). The matter of the ages of Bloom and Yeats is surely more than coincidence; perhaps Joyce is thinking there is a touch of Bloom about old Yeats.

The quest for the sacred book runs like an obsessive theme through Yeats's writings. In the essay "The Celtic Element in Literature" (1897), he prophesies the resurgence of a Celtic fountain of inspiration to revivify the world's imagination and writes: "the arts by brooding upon their own intensity have become religious, and are seeking, as I think Verhaeren has said, to create a sacred book."[33] Among the many works which at various times qualified for the honour, such as Prometheus Unbound, Yeats at one time announced that the Axël of Villiers de l'Isle Adam was his most sacred book.[34] Joyce must have viewed with a jaundiced eye this willingness to bestow the highest accolade over and over again, for in "Scylla and Charybdis," he has Buck Mulligan mock Yeats's approval of Lady Gregory's Cuchulain of Muirthemne (1902): "Couldn't you do the Yeats touch? . . . The most beautiful book that has come out of our country in my time. One thinks of Homer." (U,216)[35]

Later in his career, Yeats brings the notion of the sacred book to its true focus and applies it to his own work. In one of the preliminary sections to A Vision (1937), "A Packet for Ezra Pound," he writes, "I send you the introduction of a book which will, when finished, proclaim a new divinity."[36] The "holy book" in his "Ribh at the Tomb of Baile and Aillinn" (1934)[37] may well be a reference to his own entire poetic canon. Hugh Kenner observes that in lieu of the usual "Collected Poems" of nineteenth century popular Romanticism, ordered by mere chronology, Yeats "placed the oeuvre, the deliberated artistic Testament, a division of that new Sacred Book of the Arts of which, Mr. Pound has recalled, he used to talk."[38]

Yeats drew inspiration for his concept of the sacred book from the Symbolists. "Tout, au monde, existe pour aboutir à un livre," writes

Mallarmé in that part of Quant au Livre entitled "Le Livre, Instrument Spirituel."[39] Mallarmé wished to write the Book which would culminate the progress of the human soul and manifest the world it inhabits.[40] This Book he fancies as "mon ôeuvre, qui est L'OEuvre, le Grand'OEuvre, comme disaient les alchimistes, nos ancêtres."[41] In a letter to Paul Verlaine eighteen years later, he returns to the alchemical theme, comparing his artistic patience to that of an alchemist who is ready to sacrifice his furniture and the beams of his roof as fuel for "le fourneau du Grand OEuvre." In his case, the alchemical Work is a Book, in several volumes, like Yeats's ideal book "architectural et prémédité": "j'irai plus loin, je dirai: le Livre, persuadé qu'au fond il n'y en a qu'un, tenté à son insu par quiconque a écrit, mêmes les Génies. L'explication orphique de la Terre, qui est le seul devoir du poete et le jeu littéraire par excellence: car le rythme même du livre, alors impersonnel et vivant, jusque dans sa pagination, se juxtapose aux équations de ce rêve, ou Ode."[42]

Especially as it was perfected by Mallarmé in pieces like "Plainte d'automne" and "Frisson d'hiver," the prose poem is celebrated in a famous passage in A Rebours (which Joyce is reputed to have encountered at an early age[43]). Huysmans' hero, Des Esseintes, ponders the method of writing a concentrated novel which would contain "le suc cohobé" of what would be hundreds of pages in an ordinary novel. The words of such a work would be "impermutables"; no adjective could be "dépossédé de sa place" because of the ingenious method by which it was situated. Such a novel, writes Huysmans, would open up such perspectives that "le lecteur pourrait rêver, pendant des semaines entières, sur son sens, tout à la fois précis et multiple, constaterait le présent, reconstruirait le passé, devinerait l'avenir d'âmes des personnages, révélés par les lueurs de cette épithète unique. Le roman, ainsi conçu, ainsi condensé en une page ou deux, deviendrait une communion de pensée entre un magique écrivain et un idéal lecteur, une collaboration spirituelle consentie entre dix personnes supérieures éparses dans l'univers, une délectation offerte aux délicats, accessible à eux seuls."[44] In Finnegans Wake, Joyce echoes the three underlined words, referring to "that ideal reader suffering from an ideal insomnia" (120.13-.14).[45] Using the method recommended by Des Esseintes, Joyce only quotes the essence of Huysmans' passage, leaving it to his ideal reader to reconstruct the original, which regards the act of reading a novel as the initiation of the reader by the poet-magus.

Huysmans' description could be applied to Finnegans Wake as well as to the prose poems of Mallarmé, whose sensibilities became so refined that it became unnecessary actually to write the Book. Fulfilling Huysmans' dream, Joyce's book is the ultimate in concentrated expression; words are polyvalent, and the text assumes a liturgical aspect by virtue of the precise positioning of each word; as Joyce puts it, "the rite words by the rote order!" (167.33). As for puzzling over the meanings "pendant des semaines entières," no reader of Finnegans Wake needs a reminder of the time necessary to arrive at even a minimal understanding of the text. Des Esseintes dreams of a single "épithète" from which one could reconstruct the past, establish the present, and riddle the future of the characters. This ambition is reminiscent of Finnegans Wake and the principle of ex ungue leonem which it espouses ("given the part, the whole can be reconstructed"; see 162.29, 513.08, and 18.36-19.02, 135.28-.29, 512.28, 563.31[46]). Both A Rebours and

Finnegans Wake quote and cite several other books, in order to incorporate into themselves "le suc cohobé" of such books and the traditions from which they proceed. I suspect that by extracting and uttering what he conceives to be the essence of a great poet's work, Joyce believes that he is able to invoke the entire corpus of that work; Pound's concept of nekuia[47] would be comparable.

The few words of Des Esseintes' description of the prose poem which Joyce does quote are set in the following context: "look at this prepronominal funferal, engraved and retouched and edgewiped and puddenpadded, very like a whale's egg farced with pemmican, as were it sentenced to be nuzzled over a full trillion times for ever and a night till his noddle sink or swim by that ideal reader suffering from an ideal insomnia." (120.09-.14; Joyce's emphasis) Since this passage forms part of Joyce's extended commentary on the Tunc page of The Book of Kells, perhaps he means to say that the Tunc page fulfils Huysmans' condition of concentrated expression and that the page is a hieroglyph out of which meaning can be spun indefinitely. And if this is so, then the same is true of Joyce's Diagram (293), because, as I show, the Tunc page and the Diagram are directly related; the Diagram is the emblem out of which the entire book is constructed. The references to "engraved and retouched and edgewiped and puddenpadded" must be comments on the ill treatment which the Kells manuscript has received over the centuries. According to Sir Edward Sullivan's Introduction to the version of The Book of Kells which Joyce knew, the last few leaves, which might have informed us of the identities of the scribe and the illuminator and the place of origin, are missing.[48] In 1006, "the chief relic of the western world" was stolen, to be found hidden under sod months later without its gold and jewel-studded binding.[49] After the dissolution of Kells and the other monasteries in 1539, the manuscript came into the hands of Gerald Plunket, who proceeded to write notes on its margins,[50] as did Bishop Usher at a later date. Joyce's word "edgewiped" may signify the final mishap to befall the manuscript; early in the nineteenth century, long after it had become the chief treasure of the Library of Trinity College, Dublin, the precious manuscript was sent out to an unlettered bookbinder, "and under the barbarous hands of this craftsman many of the outer margins of its priceless illuminations have been 'trimmed' out of existence."[51]

'Work in Progress' and the tradition of the illuminated book

Both the symbolists and Yeats portray in their writings books illuminated on precious materials and sheathed in valuable bindings and casings, in recognition of their sublime worth. The first chapter of A Rebours concludes with a description of Des Esseintes' chimney-piece. Flanked by two monstrances, and with compartments like lace, is a triptych which contains "sous le verre de son cadre, copiées sur un authentique vélin, avec d'admirables lettres de missel et de splendides enluminures, trois pièces de Baudelaire: à droite et à gauche, les sonnets portant ces titres 'la Mort des Amants'---'l'Ennemi';---au milieu, le poème en prose intitulé: 'Any where out of the world:---N'importe où, hors du monde'."[52]

The hero of Walter Pater's Marius the Epicurean (1885) was wont to clear the debris of everyday life from his consciousness by reading his one "Golden Book," Apuleius' Metamorphoses. The copy he possessed "was perfumed with oil of sandal-wood, and decorated with carved and gilt ivory bosses at the end of the rollers. And the inside was something not less dainty and fine, full of the archaisms and curious felicities in which that generation delighted."[53] Joyce's early interest in Pater is documented in Stanislaus Joyce's diary, the entry for 31 July 1904: "Jim says that his ambition in life is to burn with a hard and gem-like ecstasy."[54]

Thirteen years after the publication of A Rebours and twelve after Pater's book, Yeats wrote the stories "Rosa Alchemica" and "The Tables of the Law" (1897). One might expect these two tales to play a significant role in arousing Joyce's interest in the illuminated book, for in Stephen Hero (178),[55] Stephen memorizes the second. In "Rosa Alchemica," the narrator is led to the Temple of the Alchemical Rose, where he is left alone in a room filled with alchemical books. A woman brings in "a curiously wrought bronze box," the receptacle of an alchemical text: "the peacocks of Hera spread out their tails over the sides and lid, against a background on which were wrought great stars, as though to affirm that the heavens were a part of their glory. In the box was a book bound in vellum, and having upon the vellum and in very delicate colours, and in gold, the Alchemical Rose with many spears thrusting against it, but in vain, as was shown by the shattered points of those nearest to the petals. The book was written upon vellum, in beautiful clear letters, interspersed with symbolical pictures and illuminations, after the manner of the Splendor Solis."[56]

In "The Tables of the Law," Owen Aherne ushers the narrator into his private chapel, after the latter asks why he refused the biretta. On an altar is a square bronze box like "those made in ancient times of more precious substances to hold the sacred books."[57] Inside is Joachim of

Flora's Liber Inducens in Evangelium Aeternum,[58] which heralds the supersession of the commandments of the Father and of the Son by those of the Holy Spirit.[59] The bronze box, by Benvenuto Cellini, is covered "with gods and demons, whose eyes are closed to signify an absorption in the inner light."[60] The "gilded, many-coloured" book is bound in leather, "covered with filigree work of tarnished silver," and illustrated by Giulio Clovio.[61] Aherne says that it matters not whether poets and painters and musicians are lawful or lawless, as long as "they embody the beauty that is beyond the grave," because they are the children of the Holy Spirit.[62] In the second part of the story, Aherne admits that he has committed a fatal error; by looking "out of the eyes of angels," he has lost his soul.[63] Aherne's fate is incidental to the immediate discussion, but it does bring to mind Stephen Dedalus' boast, "I am not afraid to make a mistake, even a great mistake, a lifelong mistake and perhaps as long as eternity too" (Portrait,247).

Like the Symbolists, Pater, and Yeats, Joyce too is disposed to the idea that the worth of a literary work should be manifested in its physical form and in a reverential posture upon the part of the reader. According to Ellmann, a cone of incense burned in the room in which Joyce took pupils in Trieste in 1914, and "on a reading desk, ecclesiastical in style, lay throned the vellum-covered, missal-like volume of Chamber Music which Joyce had copied on parchment pages and sent to Nora from Dublin. To enhance the atmosphere of ritual, three photographs of sculptures by Mestrovic took the place of icons."[64] Later, Joyce took as his specific model of the beautifully adorned book the famous mediaeval Irish illumination of the Holy Scriptures, The Book of Kells. He seems to have known the manuscript through Sir Edward Sullivan's edition, because in December 1922 he sent Miss Weaver a copy of it. Not only did the illumination exhibit the physical attributes of the ideal book, but it was also the stimulus to composition. At about the time that Miss Weaver received Sullivan's edition, Arthur Power expressed to Joyce his desire to write and his perplexity as to the manner of proceeding. Joyce suggested he examine The Book of Kells: "in all the places I have been to, Rome, Zurich, Trieste, I have taken it about with me, and have pored over its workmanship for hours. It is the most purely Irish thing we have, and some of the big initial letters which swing right across a page have the essential quality of a chapter of Ulysses. Indeed, you can compare much of my work to the intricate illuminations. I would like it to be possible to pick up any page of my book and know at once what book it is."[65]

The clearest documentation of Joyce's fascination with the physical appearance of his own books is the form in which Work in Progress was published. Joyce had heightened the importance of the publication of both Ulysses (1922) and Finnegans Wake (1939) by arranging to have the first copies placed in his hands on his birthday,[66] but apart from the special binding of the first edition of Ulysses - white title on a blue background, the Greek colours, which Joyce considered fortunate for himself[67] - there is nothing out of the ordinary in the first editions of these two books. However, a different attitude is in evidence with Work in Progress, which appeared serially in the twenties and thirties and was to become Finnegans Wake. Several of the episodes were published as books of particularly exquisite form, and furthermore, the last two of these contained illuminated initials rendered in the style of The Book of Kells by Joyce's daughter, Lucia.

The first published fragment of Work in Progress appeared in the transatlantic review in April 1924. The editor of the review, Ford Madox Ford, seems to have bestowed the working title upon the serial.[68] Various other fragments were published in a collection and in periodicals, notably in transition (April 1927 - April/May 1938). It was not until October 1928, with the publication of Anna Livia Plurabelle, that part of what was to become Finnegans Wake appeared in book form.[69] Anna Livia Plurabelle, though printed in a limited edition of eight hundred and fifty copies, is unremarkable as an aesthetically pleasing object. It has a plain medium brown cloth binding. However, one is tempted to derive hieratic significance from the inverted equilateral triangle gilt-stamped on the front cover, and from the single rhombus and the series of gold triangles (not quite equilateral) on the spine. This triangle design is not gratuitous, for the opening words of the dialogue between the two washerwomen assume a deltoid form:

> O
> tell me all about
> Anna Livia!I want to hear all about Anna
> Livia.Well,you know Anna Livia?Yes,of.[70]

The final text of Finnegans Wake retains A.L.P.'s typical emblem, the triangle, but it replaces the outsized O with one of ordinary dimensions and forms the triangular shape from three partial lines rather than from two:

> O
> tell me all about
> Anna Livia! I want to hear all
> about Anna Livia. Well, you know Anna Livia? Yes, of course,
> we all know Anna Livia. Tell me all. Tell me now. You'll die
> when you hear. (196.01-.06)

The triangle, as well as the rhombus, is of major emblematic significance in Finnegans Wake and is the subject of extended commentary later in the present work.

The series of fine books proper commences with Tales Told of Shem and Shaun: Three Fragments from Work in Progress, published by Black Sun Press in June 1929.[71] This edition consisted of five hundred copies on Holland Van Gelder Zonen, one hundred copies on Japanese Vellum (a material favoured by the Decadents) signed by Joyce, and fifty copies hors commerce, also on Van Gelder Zonen. On the back of the white cover is what appears to be the small black spore print of a mushroom.[72] It is of some interest that the Fragment of this edition entitled "The Muddest Thick That Was Ever Heard Dump," which was later to be expanded into FW,II.2, incorporates the Diagram much as it appears in Finnegans Wake (293),[73] but not the marginal comments made by Shem and Shaun in the final version. Reproduced in this book is Brancusi's "Portrait of the Author," an abstract design consisting of a spiral turning outwards (or inwards) in four cycles, flanked by three vertical lines of varying lengths.[74] When it was shown to Joyce's father in Dublin, this design prompted that gentleman to observe in typical fashion, "the boy seems to have changed a good deal."[75] Brancusi himself seems to have had more serious intentions, for he thought the spiral expressive of Joyce's "sens du pousser" and of his "enigmatic involution."[76]

The next published Fragment of Work in Progress exhibits some concern with design. The edition of Anna Livia Plurabelle: Fragment of 'Work in Progress' published in 1930, though on ordinary paper and priced at one shilling, has the ubiquitous equilateral triangle, deep red in colour, apex up, outlined on its tawny cover.[77]

Haveth Childers Everywhere: Fragment from 'Work in Progress' (1930), one of the most beautiful books in the series, has a pale green or white cover with green titles, and comes in a green slip case. It was composed by hand in freshly cast Elzévir Corps 16. One hundred copies were printed on imperial hand-made iridescent Japan, five hundred copies on hand-made pure linen Vidalon Royal (specially made for this edition), ten copies called writer's copies on imperial hand-made iridescent Japan, and seventy-five copies called writer's copies on pure linen hand-made Vidalon Royal.[78]

Haveth Childers Everywhere: Fragment of 'Work in Progress' and Two Tales of Shem and Shaun: Fragments From 'Work in Progress' were published in 1931 and 1932, respectively. Both were ordinary, inexpensive editions and require no further comment here.[79]

The Mime of Mick, Nick and the Maggies: A Fragment from Work in Progress (1934) and Storiella As She Is Syung: A Section of 'Work in Progress' (1937) are the last two books of the series, and they are the finest. Both feature illuminated initials by Lucia Joyce; Joyce called these large initial letters lettrines. He refers to the lettrines by name in Finnegans Wake: "And she, of the jilldaw's nest[2] who tears up lettereens she never apposed a pen upon." (276.06-.07) Issy's comment upon this passage in the footnote makes explicit the connection between colouring and Lucia Joyce's madness: "[2]My goldfashioned bother near drave me roven mad and I dyeing to keep me linefree face like readymaid maryangs for jollycomes smashing Holmes." (276.F2) Joyce first encouraged his daughter to draw her lettrines in 1931, when the initial signs of mental stress became evident. His idea was that they would appear in The Joyce Book, but when Lucia completed her work in November of that year, the editor informed Joyce that the book had already been printed.[80] However, as the light in Lucia's eyes became wilder, Joyce apparently saw the lettrines as therapy and made special efforts to have them published.[81] Joyce sincerely thought the lettrines "exquisite";[82] he compared them favourably with Matisse's illustrations for Ulysses.[83] Besides the two books from Work in Progress, Lucia's work adorned the facsimile manuscript edition of Pomes Penyeach (1932), as well as A Chaucer ABC (1936).[84]

The Mime of Mick, Nick and the Maggies: A Fragment from Work in Progress was published in 1934, after Lucia's insanity had been admitted by all but the loving father. Twenty-nine copies (a number I believe to be significant) were printed on Simili Japon of Van Gelder Zonen, bound in parchment, and signed by both father and daughter, and one thousand copies appeared on Old Antique Dutch. According to the text, "the Initial Letter, Tail-Piece and Cover were specially designed by Miss Lucia Joyce."[85] Lucia's Cover design is rendered in dark blue, silver, and dark olive and bears not the slightest resemblance to the designs in The Book of Kells, although it does depend on certain symmetrical effects characteristic of the old Irish manuscript. The Tail-Piece is a free-form representation of what might be butterflies or other insects with six small flowers, rendered in soft pastels (pink, gold-brown, green, grey), but once again, there is no suggestion of the Irish manuscript. However, the Initial Letter E of the opening words "Every evening at lighting up o'clock" (cf. FW,219.01) is an illumination that is in every respect inspired by The Book of Kells, from the stylized shape to the characteristic colours of dark blue, yellow, brown, blue, and others, and the orange dots which fringe the Letter E, as is often the case in its model. This lettrine has been reproduced by a pattern of very small dots, as in newspaper photographs; this proves to be more effective in suggesting The

Book of Kells than one might think.[86]

Storiella As She Is Syung: A Section of 'Work in Progress', published in October 1937, has a bright orange cover with the title gilt-stamped on the front; on the back cover is the figure of a bird on a twig, a ring in its mouth and its wings half open, and this is presumably the publisher's emblem.[87] Like the previous example, this is in all respects the book beautiful. One hundred and seventy-five copies were printed on Arnold hand-made paper, set in eighteen-point Centaur type; one extra copy marked A was executed on white Japanese mulberry paper for the printer. Lucia Joyce contributed only one illumination this time, the capital A of the opening words "As we there are where are we,"[88] which commence what was to become FW,II.2 (260), the Diagram chapter. Once again, this lettrine is clearly in the style of The Book of Kells, in construction and colour and in the use of brown dots to fringe the letter (twenty-nine dots surround the lower left leg). Only a portion of what is now FW,II.2 appears in this edition.

In considering the Black Sun Press edition of Tales Told of Shem and Shaun, I noted that the Fragment entitled "The Muddest Thick That Was Ever Heard Dump," also destined to become part of FW,II.2, contains the Diagram much as it appears in Finnegans Wake (293), but without the marginal comments by the twins Shem and Shaun. In Storiella As She Is Syung, on the other hand, the Diagram does not appear, while the marginal comments do. Those on the right side are in red type (reminiscent, it might be, of the red letters used in the Bible to set off the words of the Redeemer), those on the left in black. A blank space separates pages 36 and 37 in the unpaginated text, and when the text resumes, the voices have switched sides, as they do in the final text of Finnegans Wake, but the red print remains on the right side. Perhaps what is meant by this is that Shem-Jacob usurps the inheritance of Shaun-Esau and moves to the dexter margin. Both sons comprise the new Redeemer and the new H.C.E. in the end.

By having Work in Progress issued as a series of illuminated and adorned books, Joyce attaches himself to a group of writers with similar concerns, for instance, Mallarmé, Huysmans, Pater, and Yeats. William Blake deserves a passing mention in this connection; Joyce invokes Blake's engravings in the following passage from Finnegans Wake: "With pale blake I write tintingface. O, you do? And with steelwhite and blackmail I ha'scint for my sweet an anemone's letter with a gold of my bridest hair betied." (563.15-.18)[89] Issy the young bride speaks of a love-letter inscribed in the manner of Blake and tied with a thread of her hair, but Issy is here very much Lucia Joyce, who, like Blake, entered a world of visions.

Joyce and Lucia: delirium and inspiration

The derangement which overcame Lucia Joyce and the anguish which Joyce suffered on her behalf evoke a deep sympathy. However, one should not hesitate to consider the case, because the father-daughter relationship is instructive in deciphering the directions which the autobiographical elements in Joyce's art took. Lucia was born on St. Anne's Day, 26 July 1908. As one might expect, Joyce had her name already picked out, as if he had preconceived ideas of what his daughter was to be; for Joyce, Lucia was the name of the patron saint of eyesight.[90] Joyce suffered from problems with his eyesight all his life, but a period of particular aggravation coincided cruelly with the mental deterioration of his daughter-muse.[91] That Joyce himself makes this connection is evident from the revealing comparison he uses in a letter to Harriet Shaw Weaver, 9 June 1936, in which he writes that "a solution for her case . . . may come at any time as it did with my eyes."[92]

The association which he forged between his eyesight and his daughter is raised to a symbolic level by the clairvoyant powers which he attributed to her. The following incidents were regarded as proof of her powers in Joyce's circle. When Joyce visited her at Dr. Forel's sanatorium at Nyon in the summer of 1934, Lucia was very ill. She suggested to her father that he smoke a pipe; the next day, sitting on a bench in Geneva, Joyce found a pipe unexpectedly next to him.[93] Again, after she had been placed under the care of Carl Jung at Küsnacht, Joyce wrote to Miss Weaver, "her intuitions are amazing. . . . My wife and I have seen hundreds of examples of her clairvoyance. Of course I don't mean the juggling variety."[94] Joyce said Lucia had predicted that her Aunt Eileen Schaurek had moved to Bray,[95] that a helpful cable would come to Joyce from McCormack, and that a friendly notice of Work in Progress would be written;[96] all three events did, in fact, transpire. Joyce wrote Curran: "it is terrible to think of a vessel of election as the prey of impulses beyond its control and of natures beneath its comprehension and, fervently as I desire her cure, I ask myself what then will happen when and if she finally withdraws her regard from the lightning-lit revery of her clairvoyance and turns it upon that battered cabman's face, the world."[97]

Joyce had a superstitious regard for events which occurred on his own birthday, 2 February, but on two occasions at least, the day proved to be inauspicious. On that day in 1932, Lucia hurled a chair at her mother in anger, and, for the first time, she spent a few days in an asylum.[98] On the same day two years later, Lucia struck Nora at the celebration party; commitment was then admitted as inevitable.[99]

This resentment against her mother does not seem to have been casual. Even Richard Ellmann is willing to state that "she exhibited the familiar pattern of hostility towards the mother and the excessive preoccupation with the father."[100] In a letter to her father written from Jung's asylum, Lucia gave unmistakable notice of her feelings: "Father, if ever I take a fancy to anybody I swear to you on the head of Jesus that it will not be because I am not fond of you." In the postscript to this letter, she suggested that he have dinner at the Hotel Habis Royal; although she did not say so, this was the hotel where Jim and Nora spent their honeymoon years earlier.[101] In Finnegans Wake, Joyce expands upon the pattern of the old man's love for the young girl - Mark and Iseult, Lewis Carroll and Alice, Freud, Jung, and their female patients, Yeats and Iseult Gonne (possibly). Is another of the dark secrets hidden in his dreambook the incestuous overtones of the sorrowful relationship with his own daughter?[102]

The importance of the preceding incidents can be left to the individual judgement, but that an abnormally powerful link existed between father and daughter cannot be doubted. Following her first catatonic interlude, Joyce remarked, "whatever spark of gift I possess has been transmitted to Lucia and has kindled a fire in her brain."[103] Paul Léon saw that Joyce's trouble in completing Finnegans Wake after 1931 coincided with his daughter's breakdown.[104] Joyce is remembered as saying to Mrs. Jolas, "people talk of my influence on my daughter, but what about her influence on me?"[105]

Carl Jung seems to have divined the nature of that influence with a clairvoyance of his own, though it is possible that his remarks reveal more about his own ingenious theories than they do about the case of Joyce and his daughter. Ellmann denies Jung's interpretation outright.[106] The detached inquirer who cannot decide whether Lucia was Joyce's muse or simply his daughter will have to choose between the testimony of a practising physician who interviewed father and daughter on several occasions, had the daughter under his professional care, and wrote with erudition about _Ulysses_; and the word of a witness who never met the subject of his biography and who exhibits a noticeable bias against anything but the commonplace in his subject's life.

Quite simply, Jung considered Lucia to be Joyce's _anima inspiratrix_.[107] In a letter written in 1953, he explains that he regarded the pair as a classical example of his _anima_ theory:

> she was definitely his "femme inspiratrice", which explains his obstinate reluctance to have her certified. His own Anima, i.e., unconscious psyche, was so solidly identified with her, that to have her certified would have been as much as an admission that he himself had a latent psychosis. It is therefore understandable that he could not give in. His "psychological" style is definitely schizophrenic, with the difference, however, that the ordinary patient cannot help himself talking and thinking in such a way, while Joyce willed it and moreover developed it with all his creative forces, which incidentally explains why he himself did not go over the border. But his daughter did, because she was no genius like her father, but merely a victim of her disease. In any other time of the past Joyce's work would never have reached the printer, but in our blessed XXth century it is a message, though not yet understood.[108]

These cold words have the piercing quality of truth. Joyce and Jung had several interviews, in which they discussed Lucia's poems. Jung said the poems were schizophrenic; Joyce countered by declaring that they were the vanguard of a literary expression too new to be fathomed. Jung acknowledged that some of her portmanteau words and neologisms were noteworthy, but he insisted that she lacked the artistic control of her father.[109]

In his account of this meeting, Ellmann is prepared to grant that Lucia lacked control, but he says that Jung is interpreting the situation backwards, as he once did when he reviewed Ulysses. "It was not Lucia," writes Ellmann, "who, going out of her mind, invented portmanteau words; it was her father, after a quarter-century of study of the possibilities of language. . . . she was his daughter, not his muse."[110] I have had to rely on Ellmann for the "facts" about this episode, but I cannot agree with his interpretation of the material he has collected. Under an obligation to defend Joyce from the man who gave an unfavourable review of Ulysses,[111] he denies that Lucia was an inspiration for Joyce in his night-language, and yet, immediately before this statement, he records Joyce's defence of Lucia's poems as avant-garde. Are we totally to discredit Joyce himself as a witness in this matter? When he says that his daughter was his inspiration and when there is supporting evidence, may we not take his word? The lettrines which Lucia illuminated in the style of The Book of Kells were Joyce's direct connection with the magical past of Ireland and Druidism.

Elsewhere in his book, Ellmann supplies his reader with copious proof that Joyce thought of Lucia as his inspiratrix. To the evidence which I have already noted, one can add the following. In his account of Joyce's relationship with Lucia after her first experience of catatonia, Ellmann says, "Joyce had a remarkable capacity to follow her swift jumps of thought which baffled other people completely."[112] Again, he quotes Paul Léon's forthright letter to Harriet Weaver written some months after the Jung episode: "Mr. Joyce trusts one person alone, and this person is Lucia. Anything she says or writes is the thing by which he is guided."[113]

Ellmann does provide a useful list of references to Jung in Finnegans Wake, including "the law of the jungerl" (286.F3; read "Jung," "young girl," and "jungle") and "we grisly old Sykos who have done our unsmiling bit on 'alices, when they were yung and easily freudened" (115.21-.23); in the latter, Carroll's Alice is compared to Lucia under the care of Jung. One must take issue with Ellmann's identification of the passage "the curious warning sign . . . indicating that the words which follow may be taken in any order desired" (121.08-.13) as an allusion "to Jung's comment that Ulysses could be read backwards or forwards."[114] As Campbell and Robinson pointed out fifteen years before the publication of Ellmann's book, this is a reference to a device in The Book of Kells, to "the symbol C, known in Irish MSS. as 'head under the wing' or 'turn under the path' - which indicated that the words immediately following it are to be read after the next full line."[115] In addition, Ellmann overlooks the following reference to Jung and Freud, although it appears to be particularly apposite in relation to Lucia Joyce, since the word "Jungfraud's" includes jungfrau (Ger. "maid, virgin, Virgo"; it is also the name of a famous Swiss mountain): "I will write down all your names in my gold pen and ink. Everyday, precious, while m'm'ry's leaves are falling deeply on my Jungfraud's Messongebook I will dream telepath posts dulcets on this isinglass stream." (460.18-.21) The passage also speaks of writing with valuable materials and of clairvoyance, both of which are associated with Lucia Joyce.

There are striking parallels between Lucia and Anna Livia Plurabelle. Early in 1935, says Ellmann, Lucia wrote to the King of England a letter "which, like Anna Livia Plurabelle's letter in Finnegans Wake, began with the salutation: 'majesty'"[116] (see 615.13). Lucia's illuminated letters decorated the texts that were to become Finnegans Wake, which is itself the Letter written by A.L.P. Lucia's middle name was Anne,[117] and "Lucia" is similar in sound to "Livia." As I show in the last chapter of the present work, A.L.P. is the goddess of inspiration and life, and although Joyce's wife Nora is more important as a model for A.L.P., Lucia is associated in Joyce's mind with poetic inspiration.

The number twenty-nine links Lucia to Issy and the twenty-nine girls in Finnegans Wake, but Issy is also the young A.L.P. It has been demonstrated that A.L.P. is associated with twenty-nine as well (by gematria, transposing the Roman alphabet against the numbers 1 to 26, A=1, L=12, P=16);[118] one of the items in A.L.P.'s "mamafesta" is the Egyptian ritual affirmation, "I Know the Twentynine Names of Attraente" (105.25; Joyce's emphasis). In a letter to Harriet Shaw Weaver explaining the passage in which Shaun is addressed as Osiris by the girls (470.13-471.05; in Chapter Four, I consider this passage in relation to freemasonry and Mozart's opera The Magic Flute), Joyce reveals the scope of his interest in the number twenty-nine:

> The choir of girls splits in two=those who pronounce Oahsis and those who pronounce Oeyesis (cf Our Father who/which art etc). The Latin is 'Quasi cedrus exaltata sum in Lebanon etc' see A.P.O.T.A.A.A.Y.M. Belvedere College chapter. There are in all 29 words in the threnody 6X4=24 and the final 5=29 (Tu autem, Domine, miserere nobis!).
>
> This leapyear chorus is repeated lower down in imitation of the Maronite and Latin 'pax' given by embrace of arms. The girls do nothing really but turn one to another, exclaiming one another's name joyfully (Frida! Freda! etc). These are 29 words for 'Peace' taken from or modelled on the following tongues and variations (German, Dano-Norwegian, Provençal, French, Greek, French variations, Malay, Echo, Gipsy, Magyar childrens, Armenian, Sengalese, Latin variation, Irish, Diminutive, N. Breton, S. Breton, Chinese, Pidgin, Arabic, Hebrew, Sanscrit, Hindustani and English =O for goodness sake leave off!). This word was actually sighed around the world in that way in 1918.[119]

As I have shown, twenty-nine is a number that recurs in reference to Lucia's illuminations for *Work in Progress*. There were twenty-nine copies of *The Mime of Mick, Nick and the Maggies* signed by Joyce and Lucia. The initial letter *A* in *Storiella As She Is Syung* had twenty-nine dots around the lower left leg. Lucia designed a decorative alphabet for *A Chaucer ABC*, which Joyce wanted published on her twenty-ninth birthday, 26 July 1936; the book did appear in July of that year.[120] No doubt, a lunar symbolism adheres to twenty-nine. This might add strength to the association between Lucia and inspiration, for the moon is often the symbol of imagination. Like many oracles, Joyce's muse was delirious. Is this not appropriate for a book of the night and of dreams?

'Finnegans Wake' and 'The Book of Kells': the analogy by colour

Lucia Joyce's *lettrines* were plainly imitative of the illuminated letters in *The Book of Kells*. The ancient Irish manuscript itself is of major importance in *Finnegans Wake*, and it has attracted considerable critical attention.[121] In *A Skeleton Key to 'Finnegans Wake'* (1944), Joseph Campbell and Henry Morton Robinson point out that *FW*,119-123 is based on Sir Edward Sullivan's Introduction to his edition of *The Book of Kells*, and they show in some detail how this is so; the results of their investigations are still useful. Basing himself upon Campbell and Robinson, James Atherton, in *The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake'* (1959), gives a fuller account and adds much new material. In *Eternal Geomater: The Sexual Universe of 'Finnegans Wake'* (1969), Margaret Solomon extends several of Atherton's suggestions in further support of her theories about sexual symbolism in *Finnegans Wake*. I believe that Solomon tends to press her interpretations too far at times, although she does try to moderate her enthusiasm by conceding that one's image of Finnegans Wake changes according to one's point of view; its universe is with one glance the infinite cosmos, with another the human genitals. Jim Murphy's article "More from the Book of Kells" provides many specific identifications, and Seán V. Golden's note "The Quoniam Page from the Book of Kells" shows that Joyce alludes to the Quoniam page (fol.188^r, Plate XIV in Sullivan's edition), in addition to the Tunc page. As we shall see, the Tunc page is by far the most important page in the manuscript for Joyce.

In his Introduction to The Book of Kells, Sullivan summarizes Hartley's conclusions on the different materials which produced the different colours in the manuscript: black, lamp-black (or fish-bone black); bright red, realgar; yellow, orpiment; emerald green, malachite; deep-blue, lapis-lazuli; green-blue, chrysocolla; and reddish-purple, finely ground glass tinted with gold or the purple of Cassius. Chrome, red haematite, and ochres are also listed, without the colours they produce.[122] I am able to find definite reference to three of these in Finnegans Wake, and possibly four.

The first reference, to lampblack, must certainly be derived from Sullivan's Introduction, since it is found in the long passage discussing The Book of Kells: "These ruled barriers along which the traced words, run, march, halt, walk, stumble at doubtful points, stumble up again in comparative safety seem to have been drawn first of all in a pretty checker with lampblack and blackthorn. Such crossing is antechristian of course, but the use of the homeborn shillelagh as an aid to calligraphy shows a distinct advance from savagery to barbarism."

(114.07-.13) A further reference to "lampblick" (290.22) may also be taken as pertaining to Sullivan's Introduction. In the main passage quoted, the wood from which the "shillelagh" (114.12) is made is popularly thought to be "blackthorn" (114.11), although it is actually oak. This passage implies ogham, the ancient Irish tree alphabet; blackthorn, however, is not one of the trees traditionally associated with the letters of the alphabet in the oghamic systems of correspondences given by O'Flaherty and O'Sullivan (although in his revision of the system, Robert Graves suggests that Straif the blackthorn should share a month with Saille the willow). Blackthorn is generally inauspicious; according to one tradition, it was the wood used in the Crown of Thorns,[123] and this may be one reason why Joyce thinks "such crossing is antechristian" (114.11), or anti-christian.[124] Another possible reason why he thinks it so is that ogham and the culture from which it arose are pre-Christian; acceptance of this reading would be support for the theory that Joyce saw The Book of Kells as the artifact of a pre-Christian culture which lived on under the reign of Christianity.

Of the three other materials listed by Sullivan which appear in Joyce, lapis-lazuli occupies a privileged position in Finnegans Wake, in the line directly before the Diagram, where it appears as "in the lazily eye of the lapis" (293.11). Joyce may have in mind the first line of Yeats's poem "Oil and Blood" (1929), "In tombs of gold and lapis lazuli"; but Yeats's poem "Lapis Lazuli" was not published until 1938.[125] It is possible that "Malachus Micgranes" (4.04) includes Sullivan's malachite (emerald green), although there is no supporting context.

The fourth colour from Sullivan's Introduction which appears in Finnegans Wake is red haematite. Atherton has noted that Joyce's reference to "those red raddled obeli cayennepeppercast over the text, calling unnecessary attention to errors" (120.14-.15; incidentally, this follows directly upon the reference to Huysmans' "ideal reader") is based upon two statements in Sullivan's Introduction, namely: "attention is drawn to the errors by four obeli in red," and "red Haematite of an earthy nature, such as is termed raddle." The second statement identifies a pigment used in the manuscript. It is Atherton's opinion that Joyce associates Sullivan's remark on this red colour to the red crayon with which he scored the manuscripts of his books.[126] In my judgement, many of the colours mentioned in Finnegans Wake relate to Joyce's habit of composing and editing in several colours of crayon and ink.[127] A good example of a reference to this habit is the description of A.L.P.'s Letter to H.C.E. as "a huge chain envelope, written in seven divers stages of ink, from blanchessance to lavandaiette" (66.13-.15). Another example is the portrayal of the near-sighted Shem-Joyce, teaching at Berlitz and assigning seven colours (seven girls) to one of his manuscripts, guided by a miraculous light, as was St. Columba (vide infra): "Be that as it may, but for that light phantastic of his gnose's glow as it slid lucifericiously within an inch of its page (he would touch at its from time to other, the red eye of his fear in saddishness, to ensign the colours by the beerlitz in his mathness and his educandees to outhue to themselves in the cries of girlglee: gember! inkware! chonchambre! cinsero! zinnzabar! tincture and gin!) Nibs never would have quilled a seriph to sheepskin." (182.04-.11) The important pattern of sevens is considered in detail in Chapter Five of the present work.

Joyce's methods of composition are revealed in the Finnegans Wake Holograph Workbooks, held at the University of Buffalo. To consider only one instance, MS.VI.B.46 is a notebook with entries in Joyce's handwriting in blue, green, and black inks. Several of these entries have been scored through with red, green, orange, and blue crayon. After a brief examination of the Workbooks in Buffalo, I must agree with Peter Spielberg that Joyce's precise motives in using different colours are mysterious. Spielberg suggests that a definite system must exist; he is able to state with assurance that colour does not code the appearance of a word or phrase in a particular episode and surmises that it may relate to revisions.[128]

'Finnegans Wake' and 'The Book of Kells': the analogy by embellishment

In addition to the analogy by colour, both The Book of Kells and Finnegans Wake (as we have seen Joyce compared Ulysses to the Kells manuscript as well) are characterized by a passion for embellishment, or, as Joyce called his technique in a letter, "hammer and tongs stratification."[129] The question of whether Joyce's ornamentation exists for its own sake or as a device that organically contributes to the larger requirements of plot and characterization, as in Homer,[130] is still premature at this stage in Joyce studies, even though thirty-five years have elapsed from the time of his death. Some truth probably resides in both explanations, although I would tend to the first.

The Book of Kells adorns sacred words not of its own invention, the Gospels. In a somewhat analogous way, rather than inventing his material ex nihilo, Joyce usually discovered it and then variegated it to serve his delight in the possibilities of language for extravagant and luxuriant growth. He said to Frank Budgen, "when you get an idea, have you ever noticed what I can make of it?"[131] It is interesting to compare this attitude to the remark by Berkeley with which Shelley was particularly taken: "Mind cannot create, it can only perceive."[132] In Finnegans Wake, Joyce expresses his taste for "a round thousand whirligig glorioles, prefaced by (alas!) now illegible airy plumeflights, all tiberiously ambiembellishing the initials majuscule of Earwicker" (119.14-.17); miniscule, one of the Irish scripts characteristic of The Book of Kells, is altered to "majuscule" because it embellishes the initial letters of the name of majesty.[133]

The methods of multiple revision and augmentation which Joyce developed in creating his work have been closely documented and studied by many Joycean critics.[134] Sullivan deduces a similar reworking in the composition of The Book of Kells from the five-page Genealogy of Christ, which was never completed, consequently exposing the stages of its workmanship to the investigator:

> fol. 29 V., for instance, gives us the mere text in two columns with seven finely traced plain circles added by way of incipient ornamentation. In fol. 30 R. we find the same circles filled up in yellow as a ground, one only of them having a slight pattern added in red, while traces of lines are to be seen round parts of the page. The back of this leaf shows the decoration in a further state of advance, corner ornaments of winged bird-like creatures being lightly sketched in pale mauve and yellow, while some of the central circles are ornamented. A still further advance is disclosed on the page which follows (fol. 31 R.), dots in red being added round a central lozenge, a couple of small illuminated initials being also introduced.[135]

Sullivan attests to three separate writing hands in the script of The Book of Kells, and in her recent edition of the manuscript, Françoise Henry demonstrates that the work of at least three scribes and many painters is in evidence.[136]

Stephen Dedalus demanded of a work of art that it exhibit quidditas (Portrait,213). But can an art that relies on embellishment, as Finnegans Wake does, ever be considered finished? In 1927, Joyce temporarily despaired of completing his last work and formed a plan for James Stephens to do so. Because they shared first names and exact birthdays, Joyce regarded Stephens as his other self. In a letter to Harriet Shaw Weaver, Joyce declared that if "I showed him the threads he could finish the design."[137]

St. Columba was a copyist of manuscripts, and, like Joyce considered doing with Stephens, it is said that he bequeathed to his successors the task of completing those works he left unfinished.[138] The Book of Kells is thought to have been produced at Kells, the monastery which Columba, or Colum Cille, founded.[139] The historian John Healy identifies the Great Gospel of Columcille, stolen from the church of Kells in A.D. 1006, with The Book of Kells, and concludes that Columba himself wrote it, although the embellishment was completed by others.[140] Joyce may be agreeing with this identification of authorship, since he refers to The Book of Kells as "Hagios Colleenkiller's prophecies" (409.27-.28) and "Calomnequiller's Pravities" (50.09-.10).[141]

Atherton quotes Sullivan's Introduction in support of his statement that the Kells manuscript went unfinished. One can almost see, imagines Sullivan, the exact place in the manuscript where the artist left his work. Atherton is of the opinion that Joyce's remark "the copyist must have fled with the scroll" (14.17-.18) is a speculation on the cause of the alleged interruption.[142] This may be so, but a more important reference in FW,14.17-.18 is to the events leading up to the battle of Cul Dremhne (A.D. 560). Columba borrowed a book, probably the Vulgate (previously unknown in Ireland), from Finnian,[143] and unlawfully copied it. Finnian, displeased, appealed to King Diarmaid mac Cerbuill and won what may have been the first copyright judgement in history. The battle ensued, which Columba lost, and he was exiled to Iona. It can be concluded that the "copyist" fleeing with his scroll in Joyce's text is a reference to Columba copying Finnian's book. When he was covertly doing the copying by night, Columba was guided by a miraculous light emanating from his fingers (a common feature in Irish hagiography).[144] Joyce credits Shem with the performance of a similar miracle, but the source of light is his nose rather than his fingers: "but for the light phantastic of his gnose's glow . . . Nibs never would have quilled a seriph to sheepskin." (182.04-.11)

The baptism of Shaun-Kevin in Finnegans Wake is represented in a manner suggestive of the lavish embellishment of The Book of Kells. The episode reworks the historical St. Kevin's four-year period of silence and solitude[145] and concludes with his rebirth through baptism as H.C.E. (605.04-606.12). The baptism, which comes near the end of the book, should be regarded as the counterpart and reversal of H.C.E.'s act of submerging his head in a tub at the beginning of the book (4.21-.25).[146] Both Tindall and Dalton have shown how the Kevin episode is elaborated by means of the numbers seven and nine.[147] Woven into the account are seven orders of clergy, canonical hours, sacraments, liturgical colours, gifts of the Holy Spirit, mentions of the tub, and cardinal virtues; and nine concentric circles, levels of ascent, and orders of angels. Kevin moves to the centre of nine concentric circles, where he is baptized. Two crosses, one composed of hierarchies of angels and clergy, cover the nine circles. In my opinion, the ecclesiolatrous attention to detail exhibited here, as well as the subject matter, is inspired by the Kells manuscript, which is an artifact of the Irish monasticism of Patrick, Columba, and Kevin.

In his commentary on a recent edition of The Book of Kells, Peter Meyer explains the obscurity of the pages containing the large initial letters as a device to veil the holy mysteries from profane eyes. Margaret Solomon views Joyce's embellishment as a wish to disguise material embarrassing to himself; as evidence, she cites the phrases "book of kills" (482.33) and "French leaves" (50.09).[148] It is possible the two attitudes could have been held simultaneously by Joyce, for some mysteries are both sacred and profane. The Latin word sacer, used by Joyce to describe Shem (168.13), means both "sacred" and "detestable" (see my comments infra on Freud's analysis of dual meanings). Joyce may have been incapable of admitting certain matters to himself, but it is likely that the censor that troubled him more was the public censor. He had survived un succès de scandale with Ulysses, but how could he be accused of obscenity if his next book could not even be read by the censor? Another censor is the interior watchdog that causes the dream-work, which, as Freud says, transforms latent into manifest content, to modify its expression to a form acceptable to consciousness.[149] With this in mind, Finnegans Wake can be seen as realism of the unconscious, and its embellishment as the dream-work naturally employed by the mind.

The tenebrous 'Tunc' page of 'The Book of Kells': the central clue

Joyce is primarily interested in one particular page of The Book of Kells, the so-called Tunc page (fol.124^r),[150] which is named after the first word of the passage from Matt. 27:38 which it illuminates, "Tunc crucifixerant XPI cum eo duos latrones" ("Then were there two thieves crucified with him"). Joyce seems to refer to the page by name three times: "the tenebrous Tunc page of the Book of Kells" (122.22-.23), "I've read your tunc's dimissage" (298.07), and "Tunc" (611.04), the last being the first word of the Druid's argument against Patrick. According to Atherton, Joyce found in this page "symbols suggesting at one and the same time crucifixion, death, salvation and spiritual rebirth in Christian symbols, blended with the lingam and yoni of the Far East, a pagan serpent - perhaps phallic - emblem of ancient Ireland, and Rosicrucian designs of which the derivation is best described as 'occult'."[151]

The Tunc page is enclosed in a twofold blue border, which is interrupted on the upper left side by a fire-breathing lion's head; it has been suggested that this border is a serpent with a lion's head, in the act of consuming and renewing itself.[152] This is a reasonable assumption, as long as we temper it with the recognition that the abstract and geometric impulse is predominant over the urge to realism in Celtic art; when animals appear as part of a design or letter, it is the animal which is bent to suit the design or letter, and not vice versa.[153] The border has an ornamental filling interrupted by transverse bars, forming nineteen compartments of varying shapes;[154] the only one of these which interacts with the central contents of the page is the T-shape which pushes in the border at the upper right. These nineteen compartments are filled with miniature patterns, such as interlacements, frets, and ribbon-work, that in four cases (two at the bottom and one on either side of the lion's head) become tiny interweaving snakes that are being either untied or tied.[155] It is magnificently detailed work such as this which must have prompted the tradition that "the unerring lines of its ornamentation - in one space of about 1/4 inch per square may be counted, with a magnifying glass, 158 interlacements - must have been traced by angels."[156]

In the long passage in FW,I.5 in which he discusses The Book of Kells, Joyce uses three technical terms associated with illumination: ribbon, diaper, and lacertine. Since no words are hidden in the Tunc page in quite the way he suggests, Joyce may be referring to another page when he uses the word ribbon in "a word as cunningly hidden in its maze of confused drapery as a fieldmouse in a nest of coloured ribbons" (120.05-.06).

The word diaper occurs in Finnegans Wake in the description of the letter F, which, among other things, "stands dejectedly in the diapered window margin" (121.04). In his discussion of geometrical ornamentation, Sullivan draws attention to "diaper work . . . occasionally introduced to brighten small spaces lying between the larger designs of more extended elaboration."[157] The diaper design is a field of diamonds; the definition could possibly be applied to that horizontal strip in the Tunc page between the middle band of letters and the cruciform letters below, filled with the familiar red dots in diamond shapes. However, there is no F in the "diapered window margin," as in FW,121.04 (although there is one in the letters CIFIXERANT in the horizontal band immediately above) and no window (although the three alcoves on the outside of the border can conceivably be construed as windows).

The term lacertine is used by Joyce in a passage that also mentions the spiral, the serpent, and the letter S (the last should be a reference to one of the capital letters in The Book of Kells, but I cannot place it): "that strange exotic serpentine, since so properly banished from our scripture, about as freakwing a wetterhand now as to see a rightheaded ladywhite don a corkhorse, which, in its invincible insolence ever longer more and of more morosity, seems to uncoil spirally and swell lacertinelazily before our eyes under pressure of the writer's hand." (121.20-.25) The neologism "lacertinelazily" is an echo of lacertine, a word with the specific technical sense of lizard-like formations in commentary on illumination. In his Introduction, Sullivan calls the arabesque in the middle portion of fol.202^r (not reproduced in his edition) "one of the most striking instances of lacertine convolution and colour to be found in the volume."[158] To take another instance, from a commentary originally published in 1911, J. A. Herbert suggests that the winged figures and "the peculiar flamingo-like character of the lacertine birds" in The Book of Kells are evidence of an Egyptian origin of Irish art.[159] The word lacertine is also used by a more recent commentator on the illuminated book (writing nineteen years after the publication of Finnegans Wake) to describe the welter of animal forms such as hounds, birds, snakes, lizards, and mythical monsters plaited and knotted together in Anglo-Celtic illumination; David Diringer writes that the creatures used in lacertine patterns are generally avian or canine, sometimes with human heads, as in The Book of Kells.[160] This term can with justification be applied to the Tunc page, but such decoration is found throughout the manuscript.

The spiral in "spirally" (121.24) should be considered in connection with Brancusi's "Portrait of the Artist," which appears in Tales Told of Shem and Shaun. But more important than Brancusi's interpretation of the spiral, I believe, are the traditional Celtic associations, of which Joyce was undoubtedly aware. In his Introduction, Sullivan says that the spiral and interlacement, which "embody all that can be described as Celtic art in its most characteristic expression," have their origin in the prehistoric past of the Celts and, generally, of the human race in

Crete, Egypt, Mycenae, and elsewhere.[161] A favourite pattern in Celtic art, the spiral appears on a wide variety of objects.[162] According to a more recent commentator, the spiral was portrayed on walls and objects for talismanic or symbolic purposes. Françoise Henry, an expert on Irish art and editor of the most recent edition of The Book of Kells, believes that the spiral had a solar and vegetal significance:[163] "ornamentation conceived in such a way is a sort of sacred riddle. From a pagan cryptogram it insensibly merged into a Christian one."[164]

The reference in "that strange exotic serpentine since so properly banished from our scripture" (121.20-.21) is to the serpents in the Tunc page. The snake that comprises the twofold border and the five small serpents in the capital T are best glossed by Sullivan's discussion of "Serpentine decoration":

> the frequently recurring presence of serpentine forms all through the decorations of the Manuscript has given rise to the suggestion that these forms are in some way connected with the worship of ophidian reptiles. There certainly appears to be some evidence to show that amongst the immigrant races that had established themselves in the land before the introduction of Christianity the worship of the serpent was practised, though perhaps not very widely. It is even possible that this was the serpent which St. Patrick is said to have driven out of the country. The adoption of this serpentine form by the Church for decorative purposes would have been but another instance of what we know was the custom of the Christian Church in very early days, when many pagan elements were for good reasons absorbed into the practices of the Christian missionaries, and afterwards became permanently interwoven with Christian belief. Both St. Jerome and St. Augustine strongly upheld this course of action on grounds of expediency when dealing with converts from paganism.[165]

Joyce attributes an "invincible insolence" to the serpent precisely because, as a metaphor for the Druidism which Christianity replaced, it can never die. This serpent lay dormant within the new syncretic religion until it awoke once more in the days of the Irish Renaissance. The words "invincible insolence" echo the maxim "the viability of vicinals if invisible is invincible" (81.01), which describes the unbreakable bond resulting when opposites are reconciled, as were Christianity and Druidism, and as are Shaun and Shem, Patrick and Berkeley, in _Finnegans Wake_. Patrick banishes the snakes from Ireland at _FW_,19.12-.18, but somehow, Dublin remains infested with snakes.

To return to the consideration of the layout of the _Tunc_ page: at three points on the outside of the border, middle and lower right and lower left, are three alcoves, each containing five three-quarter profile figures, arranged in a quincunx (obviously as echoes of the large quincunx inside the frame) and all facing to the left. As befits the subject of the page, the Crucifixion of Christ, the expressions on the faces of those on the lower left and right range from subdued to sorrowing; those of the middle right, however, might be characterized as expressing expectant joy. Joyce refers to these figures in this passage:[166] "and then it need not be lost sight of that there are exactly three squads of candidates for the crucian rose awaiting their turn in the marginal panels of Columkiller, chugged in their three ballotboxes, then set apart for such hanging committees, where two was enough for anyone." (122.23-.27) The reference to Rosicrucianism in "crucian rose" may imply that "the crucified has risen"; Rosicrucianism draws on the Christian mystery of the Resurrection for its symbolism.[167] Robert Fludd (1574-1637) originated the symbol of the Rose-Cross as it is still known today, "a Calvary Cross, emblazoned with a Rose of five petals at the meeting-point of the arms."[168] In the _Tunc_ page, each of the "three squads" has five human figures, and perhaps Joyce equates these with the five petals of the Rose-Cross. The "three squads" are said to be "set apart for such hanging committees" (122.26-.27); two other citations of

Rosicrucianism in *Finnegans Wake* are associated with murder and death (99.27-.28, 352.30-.33; see also 155.26-.28).[169] There also seems to be a reference to the Rose-Cross in Shem's "X ray picture turned out in wealthy red in the sabbath sheets" (530.08-.09) because of "red" and "X"; but the quincunx of the *Tunc* page is also implied, as well as the fact that the outline ("X ray picture") which Shem writes, the Letter, leads directly to the Sunday morning Resurrection of Shaun-Christ (cf. 20.07-.10, which is demonstrably alchemical[170]).

The space inside the frame of the *Tunc* page is mainly taken up with the Latin text, "Tunc crucifixerant XPI cum eo duos latrones," which is split into three distinct groups, top, middle, and bottom. At the top is the magnificent capital *T*, followed by a horizontal, multi-coloured band inscribed with the letters *UNCCRu*. Atherton has pointed out[171] that Joyce calls this capital "Big Whiggler" (284.25) and refers to the letters following it as "ɴCʀ" (which also stands for Dublin's North Circular Road, connected to the circles in Joyce's Diagram[172]). Margaret Solomon suggests that the *T* in *Finnegans Wake*, which subsumes the *Tunc T*, is a major symbol, representing both the father-god and man's sexual rise and fall; she gives indisputable proof that Joyce means by it the male genitals. This is part of her more general thesis that "Joyce's five characters can be regarded as representing members of the propagating family, namely the penis and the testicles on the male side, and the labia of the vulva on the female side."[173]

The capital *T* is twisted around into the body of a lion. Its inside is filled with one large plaited knot. Both ends of the horizontal bar of the *T* terminate in legs and paws, those on the right pushing against the *T*-shaped indentation of the border at the upper right, those on the left drooping down. The left side is obviously the hind parts of the lion, because of the looping tail, which hangs down and terminates in a tri-coloured assymmetrical tripod.

In the description of Glugg (Shem), it is said that this Satan to Chuff's Michael "makes prayses to his three of clubs" (222.29),[174] that is, to the tripartite tail of the capital T (as well as to Patrick's shamrock); the tau, T, was sacred in Druidism.[175] This association with Shem might indicate that the T is allied with the forces of darkness which have temporarily triumphed over the crucified Christ, contrary to what Sullivan and Campbell suggest about its being the lion in conflict with the serpent. The tail itself is named soon after in the connective phrase "Towhere byhangs ourtales" (224.08).

In the capital T, what would normally be the vertical shaft curls around in counter-clockwise direction and ends in another lion's head; surrounding this head is a confusion of five small interlaced serpents. Both Sullivan and Campbell[176] suggest that there is a lion-serpent conflict. Sullivan thinks that the lion in the Tunc page is the symbol of St. Mark (so we are encouraged to take the lion as the representative of Christianity and Christ) and, as we have seen, that the serpent suggests the pre-Christian serpent worship banished from Ireland by St. Patrick (so that we may take the serpent as representative of Druidism and Satan). Campbell, drawing from Sullivan and obviously writing with an eye on Finnegans Wake, suggests in The Masks of God that the circumscribing serpent, symbolic of the moon and of time, is the Gnostic demiurge, while the solar lion is the Redeemer, the means of escape from this fallen world. There are a number of lions in Finnegans Wake, but I can find no reference to a lion-serpent conflict.

The middle group of letters in the Tunc page, CIFIXERANT, is contained in a simple horizontal band and requires no further comment. The bottom of the page, which occupies almost half the interior space, is essentially a square divided into four triangles by two diagonals. But because they contain two brightly coloured chevrons holding the remaining letters, the upper and lower triangles are so dominant that one sees first a quincunx or hour-glass shape. The letters are arranged in a St. Andrew's Cross,[177] and when Joyce uses the word "cruelfiction" (192.19) of Shem's painful literary attempts, he is also referring to this arrangement; in the Tunc page, the words themselves are broken like the body of Jesus Crucified.

Three of the letters here are XPI, the so-called Chrismon, not part of the biblical text, but, as Sullivan points out, "only the mediaeval note-mark composed of the monogram of 'Christi', which was arbitrarily used to call attention to remarkable passages."[178] Joyce equates this monogram with the signs of both H.C.E. and A.L.P., which become one another through a change in position: "the meant to be baffling chrismon trilithon sign ᗰ, finally called after some his hes hecitency Hec which, moved contrawatchwise, represents his title in sigla as the smaller Δ, fontly called following a certain change of state of grace of nature alp or delta, when single, stands for or tautologically stands beside the consort." (119.17-.22)[179] Joyce's assessment of the sign as "meant to be baffling" will strike anyone who attempts to discover how ᗰ and Δ are like ☧, the Chrismon. Since there is no obvious similarity in structure, the similarity must reside in their function as abbreviation or "sigla." How ᗰ becomes Δ is difficult to comprehend. Perhaps there is a clue in Joyce's word "trilithon"; according to the OED, a trilith is "a prehistoric structure or monument consisting of three large stones, two upright and one resting upon them as a lintel." The sigla ᗰ is apparently composed of four, not three, segments; if the middle member (H.C.E.'s penis) is removed, ⊓, the result, conforms to the OED definition, but it is also Joyce's sigla for Shem, ⊏. If the legs of this second sigla are then closed, one arrives at a Δ, or A.L.P.

To conclude the description of the Tunc page, the two triangles to the right and left in the lower enclosed portion are bare but for two patterns of red dots which circle and curve back upon themselves; these patterns, as well as the border (a lion-headed serpent swallowing its own tail), are suggestive of the two circles in Joyce's Diagram (293). A further connection between the Tunc page and Joyce's Diagram is in the passage "three squads of candidates for the crucian rose awaiting their turn in the marginal panels" (122.24-.25). I have suggested that this refers to the three alcoves on the border of the Tunc page, but simultaneously, it describes the marginal comments of Shem, Shaun, and Issy, which appear at the right, left, and bottom of the text of the Diagram chapter, II.2. However, instead of attending the Crucifixion depicted in the Tunc page, the children are "awaiting their turn" for a view of the secrets of female sexuality in the Diagram (293) and for their own consequent sexual initiation. There are five figures in each "squad" in the Tunc page, arranged quincuncially, just as there are five members of the Earwicker family.

The female and male triangles: reversal of the 'Tunc' page and rebirth

According to Atherton, the two passages "the tenebrous Tunc page of the Book of Kells" (122.22-.23) and "I've read your tunc's dimissage"

(298.07) show that Joyce is drawing a parallel between the arrangement of the words on the Tunc page and his own Diagram; they prove that Joyce claims "to have discovered an appositeness for the diagram as an illustration of a part of a woman's body named by an anagram of Tunc."[180] I take Atherton's suggestion further and say that Joyce's Diagram reverses the pattern of the Tunc page; the two triangles of the quincunx in the Tunc page become the lozenge of the "Cunt" page of Finnegans Wake. (see "quincecunct," 216.35). Figures 2 and 3 illustrate this reversal:

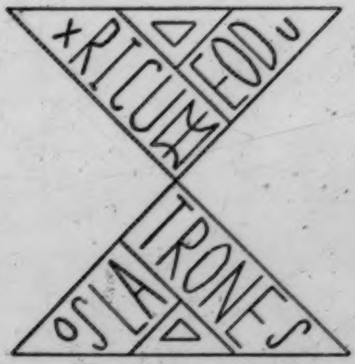


Fig.2. The quincunx in the Tunc page.

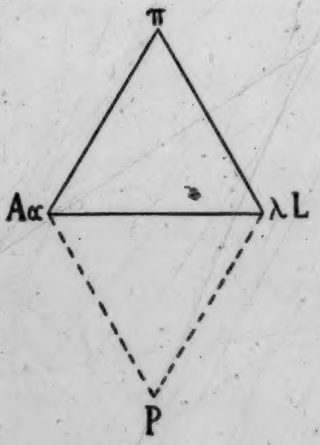


Fig.3. The lozenge in the Diagram, FW,293.

According to Margaret Solomon, the following passage is a description by Joyce of the Tunc page: "It follows that, if the two antesedents be bissyclitties and the three comeseekwenchers trundletrikes, then, Aysha Lalipat behidden on the footplate, Big Whiggler restant upsittuponable, the жCʀ presents to us (tandem year at lasted length!) an ottomantic turquo-indaco of pictorial shine by pictorial shimmer." (284.22-.29)

She writes that Joyce "saw his genital family on this Tunc page: the three-part 'Big Whiggler' 'T' at the top and the double-triangled female symbol ('Tunc' letters jumbled) at the bottom."[181] In my opinion, *FW*, 284.22-.29 also applies to Joyce's Diagram, giving us another direct link between it and the *Tunc* page. Viewed as a description of the Diagram, "Aysha Lalipat behidden on the footplate" (284.24-.25) can be read as meaning that A.L.P. is the lower triangle, marked ALP, while "Big Whiggler restant upsittuponable" (284.25-.26) means that H.C.E. is to be identified with the upper triangle, marked αλπ. As we have seen, the designation "ɴCʀ" (284.26), besides referring to four of the letters *UNCCRu* in the first horizontal band of the *Tunc* page, stands for "North Circular Road," the ring road of Dublin; with respect to the Diagram, it can be applied to the two circles which intersect to produce the triangle. The text says that "the ɴCʀ presents to us (tandem year at lasted length!) an ottomantic turquo-indaco of pictorial shine by pictorial shimmer" (284.26-.29); that is, the two ("tandem") circles ("ɴCʀ") of the Diagram are Shaun ("shine") and Shem ("shimmer"). It should be added that the two circles are elsewhere referred to as "Outer serpumstances beiug ekewilled" (297.07); this might link the serpent swallowing its tail which forms the border of the *Tunc* page with the two circles in the Diagram.

Further proof is given in the Burrus-Caseous episode that the upper triangle αλπ is male and the lower triangle ALP is female. The twins ascend "their isocelating biangle" (165.13); they appear to be the two sides απ and λπ of the upper triangle. When H.C.E. enters as Antonius, he forms a triangle with his sons: "This Antonius-Burrus-Caseous grouptriad may be said to equate the *qualis* equivalent with the older socalled *talis* on *talis* one just as quantly as in the hyperchemical economantarchy the tantum ergons irruminate the quantum urge so that eggs is to whey as whey is to zeed like your golfchild's abe boob caddy." (167.03-.08) Commenting on this passage, W. Y. Tindall writes that "triangle ABC is now equivalent to triangle HCE, there by initials, and to triangle ALP. Usually female, the triangle, by a female's intervention, is male as well. After all, *talis* is *qualis*, *tantum* is *quantum*, and each thing joins its opposite. H.C.E., as 'Hag Chivychas Eve' (30.14), is A.L.P."[182]

If one considers the Diagram strictly from the structural point of view, one expects the five lines in the two triangles to correspond to the five family members: Shem and Shaun should be the two upper sides $\alpha\pi$ and $\lambda\pi$, A.L.P. and Issy should be the two lower sides AP and LP, and H.C.E. should be the line $\alpha\lambda$/AL the two triangles have in common. But as Tindall's remark makes clear, every aspect of *Finnegans Wake* is polyvalent. Although the Diagram is both male and female from one point of view, from another it is entirely female (see 164.05-.07; 165.21-.24); the first part of Chapter Five I devote to a consideration of this aspect.

In Chapter Three, I discuss in detail the correspondences between Joyce's Diagram and the figure illustrating Euclid's First Proposition. The one difference between the two is that Joyce adds the two dotted lines AP and LP; this addition can be explained as an indication of the male and female genders of the upper and lower triangles. In the directions for its construction, the Diagram is compared to Solomon's Seal, which, as I show in Chapter Four, is traditionally the union of the upper, male principle and the lower, female principle: "if you flung her headdress on her from under her highlows you'd wheeze whyse Salmonson set his seel on a hexengown. . . . Outer serpumstances beiug ekewilled, we carefully, if she pleats, lift by her seam hem and jabote at the spidsiest of her trickkikant . . . the maidsapron of our A.L.P., fearfully! till its nether nadir is vortically where . . . its naval's napex will have to beandbe." (297.01-.14) One is asked to think, that is, of the lower triangle ALP, pointing downwards, being rotated on its upper side AL out of the plane of the page until it points upwards, forming the upper triangle αλπ. Acceptance of this hypothesis will allow one to account for the dotted lines AP and LP; the dots indicate that the triangle that was once in that position is no longer there. The male triangle is raised or resurrected out of the female triangle.

Near the beginning of II.2, Joyce quotes part of a fundamental axiom of alchemy and of the doctrine of correspondences from the Smaragdine ("emerald") Tablets, an alchemical text said to have been written by Hermes Trismegistus: "The tasks above are as the flasks below, saith the emerald canticle of Hermes and all's loth and pleasestir." (263.21-.23; my emphasis) One translation of the original formula upon which this is based is "what is below is like that which is above, and what is above is like that which is below, to accomplish the miracles of one thing."[183] Notice that Joyce supplies only half the formula, that which derives the upper from the lower (the other half is given elsewhere as "the belowing things ab ove," 154.35); in the same way, it is my contention, the upper triangle arises out of the lower triangle in the Diagram. Notice, too, that the initials of H.C.E. and A.L.P. are hidden in the passage, but that those of H.C.E. are in reverse (as they are at 264.03 and 284.01); both male and female are involved in the Diagram, and one is the reversal of the other, as I show later in this chapter in considering Blake's "The Mental Traveller." The reversal of the letters H.C.E. seems to indicate that the male principle is passive while it is produced in the alchemical process being worked by A.L.P.

The lozenge in Joyce's Diagram enacts the Resurrection of H.C.E. by A.L.P. It is a reversal of the quincunx in the Tunc page, which portrays the Crucifixion and Death of Jesus Christ. These two geometrical figures reverse one another structurally, as an emblem of the opposites which they embody: Tunc and "Cunt," death and life, man and woman, and waking and dreaming. The Diagram in Finnegans Wake, it is my contention, is the blueprint of H.C.E.'s reconstruction used by A.L.P. the "eternal geomater" (296.31-297.01), that is, "the mother earth who eternally gives birth by geometry" (to waking male consciousness). As I demonstrate in the final chapter, A.L.P. is the creative power who, like Isis, collects the fragments of H.C.E.-Osiris in her alchemical "nabsack" (11.19) and resurrects the new H.C.E.-Osiris. H.C.E. awakes as the Trinity[184] and begins building a new tower which inevitably collapses, and a new cycle begins.

As I show in the last chapter, A.L.P. is associated with the tantric goddess Śakti, who is imagined to be the Serpent Power which rushes up the spinal column to awaken her sleeping male counterpart, Śiva. In Finnegans Wake, the female power surges up from the depths of the unconscious mind and the past to revitalize the fallen H.C.E.[185] The Tunc page and Joyce's Diagram are analogous to the mandalas used in tantrism and other Eastern religions to invoke gods and powers.

As a serpent, A.L.P. is also connected with Druidism and serpent-worship, of which traces are to be found, says Sullivan, in The Book of Kells. In the passage FW,19.12-.18, Joyce refers to the fact that although Patrick is said to have banished the snake from Ireland, it still remains. He also links the serpent and the Fall to the phallic sexuality with which Christianity has never reconciled itself. Frank Budgen tells us that when Joyce was choosing his ideal hero, he disqualified Christ on the grounds that "he was a bachelor and never lived with a woman. Surely living with a woman is one of the most difficult things a man has to do, and he never did it."[186] By suppressing sexuality and the life energy of which it is an aspect, Christianity is a religion of death. The Tunc page, which portrays the Crucifixion, holds in bonds the serpent, which returns when its bonds are loosened. Such a return occurs at the Diagram, and generally throughout Finnegans Wake, because the Diagram reverses the Tunc quincunx and releases the pre-Christian, Druidic past.

Shem's penultimate marginal comment in II.2, "MAWMAW, LUK YOUR BEEFTAY'S FIZZIN OVER!" (308.R1),[187] is partially to be explained as a comment on the Tunc page. "MAWMAW, LUK" stands for "Matthew, Mark, Luke, and John"; The Book of Kells illuminates the Gospels. "YOUR BEEFTAY'S FIZZIN OVER!" refers to the capital T ("TAY") of the Tunc page, which is overflowing the knots and lines which constrain it, as do all the various animal ornaments on the page. Shem as the Druid Berkeley is related to Yeats and the other writers of the Irish Renaissance who were concerned with reviving pre-Christian mythologies; discussing the Dreaming Back state and the expiation of past events in A Vision (1937), Yeats describes a knot that is similar to the knot binding the serpent in the Tunc page: "all that keeps the Spirit from its freedom may be compared to a knot that has to be untied or to an oscillation or a violence that must end in a return to equilibrium."[188]

The sudden infusion of the past into the present, an article of Vichian theory, is represented for Joyce by the archaeological discoveries of his time, particularly the opening of Tutankhamen's tomb in 1922. History is a palimpsest that may reveal its past layers at any moment; the past is contemporaneous with the present. Just as The Book of Kells was buried beneath some sods for a time and then rediscovered, so the Druidic past re-emerges from Christianity. Though the past appears to have been irretrievably lost when a world cycle ends in oblivion, or when libraries are burned,[189] some fragment of the past survives and returns to A.L.P.'s providential womb as the seed of a new cycle.

"The Mental Traveller" and the alternation of female and male cycles

The alternation of influences - Crucifixion and Resurrection, death and life - of which I have been speaking are to a certain extent based upon Blake's poem "The Mental Traveller" and, more especially, upon Yeats's understanding of it. Clive Hart has analysed the pattern of youth and age in Finnegans Wake in Blakean terms. In Books III and IV, A.L.P. ages as Shaun becomes progressively younger, until in Book IV he disappears into the womb, where he splits into two seeds, Patrick and Berkeley. Earwicker becomes Shaun through his love for Issy; in a similar way, the old man is rejuvenated through a female child in Blake's poem.[190] Hart does not account for the process by which the old A.L.P. becomes the young Issy. At the end of Joyce's book, A.L.P. is old and exhausted from her task of renewing H.C.E. Presumably, after she flows into the ocean at the end, she is raised into the sky as evaporated moisture and falls as rain (the young girl) to start the cycle and the next Fall of H.C.E. However, if this is what Joyce has in mind, it takes place outside the book, and it does not correspond to Blake's poem. At the end of Finnegans Wake, the male power is ascending, the female descending. In the middle of the book, at the Diagram, the female power is at its zenith. This pattern of alternation should be understood as a further implication of the reversal of the Tunc quincunx.

Immediately before the Diagram, Joyce makes a remark on this alternation of life and death: "a poor soul is between shift and shift ere the death he has lived through becomes the life he is to die into." (293.02-.05) Here he is not thinking of Blake, but of Yeats's understanding of Blake (and of what Yeats calls the Shiftings). In A Vision, Yeats writes, "it is as though the first act of being, after creating limit, was to divide itself into male and female, each dying the other's life living the other's death."[191] If Yeats is relevant to the alternation of male and female and to Joyce's Diagram, then perhaps when Joyce reverses the Tunc quincunx into a lozenge, he is also, like Yeats, thinking on the scale of the grand historical cycles. In A Vision, Yeats conceives these cycles as occurring in a mathematically precise fashion: "What if Christ and Oedipus or, to shift the names, Saint Catherine of Genoa and Michael Angelo, are the two scales of a balance, the two buttends of a seesaw? What if every two thousand and odd years something happens in the world to make one sacred, the other secular; one wise, the other foolish; one fair, the other foul; one divine, the other devilish? What if there is an arithmetic or geometry that can exactly measure the slope of a balance, the dip of a scale, and so date the coming of that something?"[192]

The lozenge, the quincunx, and Yeats and the Order of the Golden Dawn

Light can be shed on the reversal of the Tunc quincunx into the lozenge of Joyce's Diagram through an examination of the way the triangle and Solomon's Seal and its variants are treated by Yeats and his immediate tradition. The symbolism of the triangles can be traced, in modern times, through the Cabbalists, Boehme, Law, Blake, and Madame Blavatsky and the Theosophists to Yeats and the members of the Order of the Golden Dawn. Joyce names this Order in Finnegans Wake as "golddawn glory" (99.01).[193]

Interlaced triangles are the central motif in Madame Blavatsky's signet ring and personal seal, which should be mentioned here because of a similarity to the large pattern of the Tunc page. This ring features Solomon's Seal (corresponding to the two lower triangles in the Tunc page) encircled by a serpent swallowing its own tail (corresponding to the serpent margin). At the top, right and left, are the zodiacal signs for Virgo and Leo, and at the bottom, right and left, the Greek letter omega and the Hebrew letter shin. It has been shown that Yeats had these four signs in mind in his poem "Those Images."[194] In Chapter Four of the present work, I return to a detailed consideration of Solomon's Seal.

Magical diagrams involving equilateral triangles are to be found time and again in the writings of S. L. MacGregor Mathers, the chief of the Golden Dawn, who taught Yeats ritual evocation via geometrical figures in the nineties.[195] In The Key of Solomon the King (Clavicula Salomonis), which was first translated and edited by Mathers in 1888, it is said that the Third Pentacle of Venus, "if it be only shown unto any person, serveth to attract love." This Pentacle is composed of a quincunx inside concentric circles, with Gen. 1:28 inscribed in Hebrew and Hebrew names written within the figure.[196]

More important than anything Joyce might have learned from Blavatsky or Mathers is the fact that the very reversal which I claim Joyce sets up between the Tunc quincunx and the lozenge in his own Diagram can also be found in the works of two of his contemporaries, Crowley and Yeats, both members of the Golden Dawn. In his "Liber O vel Manus et Sagittae sub Figura VI," Aleister Crowley (who can in many ways be described as Yeats's doppelganger) presents the instructions for the evocation and banishment of spirits by "The Lesser Ritual of the Hexagram." This ritual begins with a quadripartite re-enactment of the death and resurrection of Osiris and concludes with a description of four Hexagrams, each of which consists of two equilateral triangles in different positions: Fire, the East, with the triangles "both apices pointing upwards," the apex of the lower at the centre of the upper; Earth, the South, consisting of Solomon's Seal; Air, the West, in which "the bases of the triangles coincide, forming a diamond"; and Water, the North, with "the lower triangle placed above the upper, so that their apices coincide."[197]

It is readily apparent that Crowley's figures for Air and Water (diamond and quincunx) reverse one another, and that these are precisely the two figures involved, respectively, in Finnegans Wake and The Book of Kells. Furthermore, both Crowley and Joyce associate their diagrams with death and rebirth. That Crowley, Joyce's contemporary, used the same figures for magical purposes makes it possible that Joyce would do so. I do not want to give too much weight to the Crowley-Joyce analogy, but it does seem that Crowley appears in Finnegans Wake. M. J. C. Hodgart thinks he is alluded to at FW,105.27 ("Crowalley"), 229.12 ("Crowhore"), 231.05 (?), 232.28 ("crowy"), and 244.35-.36 ("Eliphas Magistrodontos"; Joyce's emphasis), and that his motto, "Perdurabo," is cited as "perdunamento" (220.21).[198] The only one of these to which I can attach any credence is the first. Adaline Glasheen finds Crowley in

"Creeping Crawleys" (288.F6; she attributes the identification to Atherton) and, with Mathers, in "he has the solitary from seeing Scotch snakes" (422.05-.06); her line of reasoning in making the second identification, which I find merely possible, is that in his Letters, Yeats states that Mathers and Crowley often dressed in Highland costume.[199]

More convincing examples of the reversal of triangular forms are found in the works of W. B. Yeats, specifically in A Vision. It has been both affirmed and denied that Joyce's Diagram is related to Yeats's intersecting gyres.[200] I, for one, fail to see how they cannot be related. In "The Great Wheel," Book I of A Vision, Yeats explains the movements of Will and Creative Mind; the Faculties are represented "as moving always along the outside of the diagram."[201] Such movements are highly suggestive of those made in Finnegans Wake by Burrus and Caseous on "the climactogram up which B and C may fondly be imagined ascending" (165.23-.24); as I show elsewhere, this passage refers directly to the Diagram. In Book II of A Vision, when Yeats comes to describe the relationships between the Faculties ("man's voluntary and acquired powers and their objects") and the Principles ("the innate ground of the Faculties"), he illustrates them with two diagrams, in both of which a diamond and an hour-glass are superimposed on one another and placed within a circle. The diamond is drawn between Creative Mind and Body of Fate on the circumference, the hour-glass between Will and Mask: "within these figures move the Principles; Spirit and Celestial Body in the figure shaped like an ace of diamonds, Husk and Passionate Body in that shaped like an hour-glass."[202] The diamond is a substitute for the sphere, which is Yeats's image for "the ultimate reality";[203] the hour-glass stands for "two meeting spheres."[204] Yeats returns to these two figures in Book IV of *A Vision*: "at the birth of Christ took place, and at the coming *antithetical* influx will take place, a change equivalent to the *interchange of the tinctures*. The cone shaped like an ace of diamonds - in the historical diagram the cone is folded upon itself - is Solar, religious and vital; those shaped like an hour-glass Lunar, political and secular."[205] I maintain that Joyce had Yeats's diamond-hourglass opposition in mind as an analogue of his own lozenge-quincunx relation.

Among the many possible references to *A Vision* in *Finnegans Wake*, the following is indisputable: "while that Other by the halp of his creactive mind offered to deleberate the mass from the booty of fight our Same with the holp of the bounty of food sought to delubberate the mess from his corructive mund, with his muffetee cuffes ownconsciously grafficking with his sinister cyclopes after trigamies and spirals' wobbles pursuiting their rovinghamilton selves." (300.20-.28) This passage is a direct parody of the "Rules for Discovering True and False Masks" which Yeats formulates in *A Vision*: "in an antithetical phase the being seeks by the help of the Creative Mind to deliver the Mask from Body of Fate. In a primary phase the being seeks by the help of the Body of Fate to deliver the Creative Mind from the Mask."[206] The words "Other" (300.20) and "Same" (300.22) in Joyce's passage bring in Plato's *Timaeus*. Joyce probably includes Plato because of a statement by Yeats concerning his attempts to superimpose a lunar zodiac upon a solar one; the signs in the lunar cycle, which run from right to left, and those in the solar, which run from left to right, "have much the same character, being respectively particular and universal, as the circles of the Other and the Same in the *Timaeus*. In the first *Will* moves and its opposite, in the second *Creative Mind* and its opposite, or we may consider the first the Wheel of the *Faculties*, the second that of the *Principles*."[207] Lunar-Other-Faculties and Solar-Same-Principles form two chains of correspondences.

In *Finnegans Wake*, Shem is identified with the Other, Shaun with the Same. The Other is the inferior movement of the seven planets in Plato's cosmology (which I consider more fully in Chapter Three), and Shem-Berkeley consequently argues that light is sevenfold; the Same in Plato is the primary, unified movement of the fixed stars, and Shaun-Patrick argues that light is one (610.34-612.36).[208] Therefore, we can conclude that Shem is to be identified with the Lunar, Antithetical, Subjective phase in Yeats's system, and Shaun with the Solar, Primary, Objective phase. Since we have seen that in Yeats's system the diamond is Solar and the hour-glass Lunar, we might want further to conclude that Shem is to be identified with the quincunx in *The Book of Kells* and Shaun with the lozenge in the Diagram of *Finnegans Wake*. This sounds like a logical sequence of conclusions, but if Shem is the quincunx of the Crucifixion and Shaun is the lozenge of the Resurrection, then why does Shem have the "lifewand" (195.05) and Shaun the "deathbone" (193.29)? One might attempt to explain this discrepancy away as some sort of reversal of opposites. The fact that Shem and Shaun switch margins at the Diagram is suggestive of Yeats's "interchange of the tinctures."

The passage *FW*,300.20-.28 enacts the reversals through a type of chiasmus, a common rhetorical device in Joyce. Shaun, the Same, desires to rid his mind of "the mess," "mask," and "Shem" (backwards), but this is impossible, since Shem affects him "ownconsciously," and because, as Empedocles (quoted by Yeats) says, "never will boundless time be emptied of that pair; and they prevail in turn as that circle comes round, and pass away before one another and increase in their appointed turn."[209]

Reversals: the cross, the kiss, and the horn-book

The reversal of the quincunx from the *Tunc* page by the lozenge in Joyce's Diagram is part of a larger pattern of reversals in *Finnegans Wake*. This pattern does not add directly to an understanding of the geometric symbolism of the book, but an examination of its extent will show how probable is what I have said about the quincunx-lozenge reversal. *Finnegans Wake* is replete with references to reversal; the word "backwards" occurs in several variations, such as "back" (213.17; two lines earlier is "erewone"), "Backwoods" (244.01), "backwards" (248.18), "backwards" (368.02), and so on. I should like to discuss some of the larger thematic and structural reversals and will consider the following: the kiss motif; the Black Mass in *Ulysses*; witchcraft and reversal; rhetorical inversions; linguistic inversions connected with Freud and Egypt; and structural and psychological reversals associated with Yeats and his circle.

I have shown in some detail how the following passage is connected to the alcoves in the border of the *Tunc* page, to the marginal comments of Shem, Shaun, and Issy, and to Rosicrucianism. It also contains three Latin words for "kiss," namely, "*oscula*," "*basium*," and "*suavium*":

> then (coming over to the left aisle corner down) the cruciform postscript from which three *basia* or shorter and smaller *oscula* have been overcarefully scraped away, plainly inspiring the tenebrous *Tunc* page of the Book of Kells (and then it need not be lost sight of that there are exactly three squads of candidates for the crucian rose awaiting their turn in the marginal panels of Columkiller, chugged in their three ballotboxes, then set apart for such hanging committees, where two was enough for anyone, starting with old Matthew himself, as he with great distinction said then just as since then people speaking have fallen

> into the custom, when speaking to a person, of saying two is company when the third person is the person darkly spoken of, and then that last labiolingual *basium* might be read as a *suavium* if whoever the embracer then was wrote with a tongue in *his* (or perhaps her) cheek as the case may have been then). (122.20-.34; Joyce's emphasis)

The reader is clearly meant to associate the Cross of Christ (the quincunx in the *Tunc* page) with a kiss,[210] for both are signified by an *X*, which customarily means "kiss" when placed at the bottom of a letter. All the kisses in *Finnegans Wake* ultimately refer back to A.L.P.'s Letter; A.L.P.'s name is sometimes mutated to suggest "lips" (which deliver a kiss), as in "Lps" (628.15). One of the many versions of the Letter concludes: "must now close it with fondest to the twoinns with four crosskisses for holy paul holey corner holipoli whollyisland pee ess from (locust may eat all but this sign shall they never) affectionate largelooking tache of tch." (111.16-.20) The *X* ("four crosskisses") and the *T* ("tache of tch") should be related to the quincunx and the capital *T* in the *Tunc* page.

Joyce again associates the kiss and the Cross in the words "With Kiss. Kiss Criss. Cross Criss. Kiss Cross" (11.27), which refer to the *X*'s at the bottom of the Letter; he is abetted by the English word *Christ-cross*, which (with its variants, such as *criss-cross*, *Christ-cross-row*, and so on) is the name of the sign of the cross (✠) preceding the alphabet in a horn-book, or to the alphabet itself. Among other allusions to the Christ-cross are: "let every crisscouple be so crosscomplimentary" (613.10-.11, which brings in the reconciliation of opposites); "pen . . . publickers, Nolaner and Browno . . . Christcross . . . her letters" (412.32-413.09); "bound to the cross of your own cruelfiction" (192.18-.19); "Such crossing is antechristian" (114.11); and "crisscrossed Greek ees" (120.19; the context is a description of the *Kells* alphabet; both Joyce and Bloom, *U*,280, wrote with "Greek ees"[211]).

The horn-book was the first elementary textbook which the students could handle themselves. Typically, it consisted of one sheet only, mounted on a wooden block with a handle. On the sheet were inscribed the Christ's cross (✠), the alphabet in small letters and in capitals, the vowels, both alone and paired with consonants, the Exorcism, and the Lord's Prayer. The name *horn-book* derives from the fact that the sheet of paper or vellum was protected by a thin layer of horn.[212]

The text of the *Margarita Philosophica* (1503), a popular encyclopaedia of its day, which presents the entire *trivium* and *quadrivium*, is preceded by a woodcut illustrating the scope of the work. In this woodcut, Dame Wisdom, holding a horn-book, leads a child to the tower of learning, whereon the subjects of study are ranged, with portraits of the most eminent practitioner of each. Among these, geometry is typified by Euclid, the importance of whom in *Finnegans Wake* I consider in Chapter Three.[213]

Joyce uses the very word *horn-book* when he has Shaun say of Shem that he has "his unique hornbook" (422.14-.15). In all likelihood, Shem has the horn-book because it is he who initiates Shaun into the elemental sexual mysteries of the Diagram; in addition, he is the scribe who, as the servant of A.L.P., the fount of wisdom, arranges the letters of the alphabet to construct the Letter. The horn-book was edged with a brass or, more rarely, tin strip known as the *latten*, which held the horn in place.[214] One of the items in Shem's house is "upset latten tintacks" (183.20); implied is "upset Latin syntax," as well as "tin latten." The word *Christ-cross* and its variants provide Joyce with a fortuitous linking of Christ's Crucifixion as it is presented in the *Tunc* page, the kiss (because of X), the illuminated initials of the Tunc page, and the alphabet itself, which is the elements of language, knowledge, the Letter, and the universe (cf. the cabbalistic theory that God created the universe directly through the letters of the alphabet).

Diabolic reversal: the kiss and the Black Mass

The kiss motif in Finnegans Wake apparently contains an important secret, for there is a "key in my kiss" (279.F08) and, in a Letter passage, a "Key at Kate's. Kiss" (421.04). We have seen that the kiss is related to the Crucifixion and to the alphabet, and this complex of associations explains to some extent how the kiss is a key. But the kiss motif is also related to reversal, which should be expected from the X or crossing which signifies it. In the final version of the Letter, H.C.E. is "kissing and looking into a mirror" (618.19); the kiss is associated with the reversal in a mirror.

Another way in which the kiss is connected with reversal is to be seen in Joyce's portrayal of genital and anal kisses, the profane counterparts of kissing the Cross of Christ. A genital kiss is clearly delivered in this passage: "I'd give three shillings a pullet to the canon for the conjugation to shadow you kissing her from me leberally all over as if she was a crucifix. It's good for her bilabials, you understand." (465.23-.26) Another passage that connects the crucifix and the female genitals is "crossbones strewing its holy floor, and culprines of Erasmus Smith's burstall boys with their underhand leadpencils climbing to her crotch for the origin of spices" (504.25-.28); the context (504.20-505.13) is a description of the Diagram as a tree with the family members in it, so that Tunc and "Cunt" are again associated with the Diagram. In what way is a crucifix like a woman's body? Tunc is the name of the page on which the Crucifixion is portrayed, and it is also an anagram of "Cunt." In their own ways, both are connected with man's Fall (and Resurrection). Ultimately, however, the Crucifixion (death) is the very opposite of the female genitals (life). The large X or quincunx ("quincecunct," 206.35) of the Tunc page becomes a lozenge in Joyce's Diagram.

In the passage FW,122.20-.34, which has already come under considerable scrutiny, there is a hint of an anal kiss in the phrase "with a tongue ~~in his (or perhaps her)~~ cheek" (122.33-.34); perhaps this is the unspecified "perversion as the dark, tabooed sin" which Margaret Solomon finds in this passage.[215] In several other passages, the reference to the anal kiss is unmistakable: "kissists my exits" (280.27; note that this includes an x); "both cheeks kissed at levee by late marquess of Zetland" (543.36-544.01; here H.C.E. is holding court with an all-male, perhaps freemasonic, assemblage); "kisses from the antipodes" (183.31; one of the items in Shem's house); "Kisser for him, K.M. O'Mara where are you?" (122.19; this is reminiscent of the headlines "K.M.A." and "K.M.R.I.A.," U,146,147). Just after Dolph asks Kev if he can do the geometry problem, one reads, "Nor was the noer long disappointed for easiest of kisshams, he was made vicewise" (286.28-.29); "hams" in "kisshams" can be read as "buttocks," while "vicewise" implies both the initiation into sexual sin and a reversal.

Clive Hart lists some of the above passages as examples of the osculum ad anum diaboli. I am in agreement with his observation, although it should be noted that osculum infame is the more usual term used to denote the anal kiss which is the ceremonial act of allegiance to the Devil at a Black Mass.[216] The "black mass" is named at FW,193.34, and there is an allusion to the practice of kissing the hind parts of the Devil as a goat in "So help her goat and kiss the bouc" (94.29), which is a variation of the "kiss the book" motif in Finnegans Wake;[217] the male God is degraded into a woman's "goat," to which there is a second reference in "bouc" (Fr., "he-goat"). The goat is the diabolic animal par excellence; one authority on witchcraft testifies that at the Sabbath "witches who were most expert and specially cherished by Satan . . . like him . . . assumed some animal form, most often that of a he-goat."[218]

An infamous portrait of the Devil as the Sabbatic Goat, or the Baphomet of Mendes, is to be found in Eliphas Lévi's Transcendental Magic (1856).[219] Joyce is almost certainly referring to this very portrait in a working note to the "Cyclops" episode of Ulysses: "right hand up (solve)/ left down (coagula)."[220] In Lévi's portrait, the right hand, with the word solve on the right forearm, does indeed point up, while the left hand, with the word coagula on the left forearm, points down. The formula solve et coagula ("dissolve and collect") epitomizes the alchemical process; Levi specifically associates Baphomet with "the First Matter of the Great Work."[221] As the goat of Mendes, the figure is related to the fifteenth Tarot trump, the Devil,[222] but Lévi goes on to write that the worshippers of the idol saw it as Pan, not the Devil. He describes the portrait of Baphomet in the following provocative terms:

> the goat which is represented in our frontispiece bears upon its forehead the Sign of the Pentagram with one point in the ascendant, which is sufficient to distinguish it as a symbol of the light. Moreover, the sign of occultism is made with both hands, pointing upward to the white moon of CHESED, and downward to the black moon of GEBURAH. This sign expresses the perfect concord between mercy and justice. One of the arms is feminine and the other masculine, as in the androgyne of Khunrath,

> whose attributes we have combined with those of our goat, since they are one and the same symbol. The torch of intelligence burning between the horns is the magical light of universal equilibrium; it is also the type of the soul exalted above matter, even while cleaving to matter, as the flame cleaves to the torch. The monstrous head of the animal expresses horror of sin, for which the material agent, alone responsible, must alone and for ever bear the penalty, because the soul is impassible in its nature and can suffer only by materializing. The caduceus, which replaces the generative organs, represents eternal life; the scale-covered belly typifies water; the circle above it is the atmosphere, the feathers still higher up signify the volatile; lastly, humanity is depicted by the two breasts and the androgyne arms of this sphinx of the occult sciences. Behold the shadows of the infernal sanctuary dissipated! Behold the sphinx of mediaeval terrors unveiled and cast from his throne! *Quomodo cecidisti, Lucifer!* [223]

Like Lévi, Joyce realizes that unity is impossible without the establishment of equilibrium between opposites; without the profane kiss, there could be no sacred kiss, and vice versa. Lévi is named in *Finnegans Wake* as "*Eliphas Magistrodontos*" (244.35-.36; Joyce's emphasis),[224] and the occult treatise *Nychthemoron* by Apollonius of Tyana, which was translated by Lévi and appended to his *Transcendental Magic*, is cited in "nichthemerically" (185.29).[225]

The first spoken words of *Ulysses*, "*Introibo ad altare Dei*" (*U*,3; Joyce's emphasis), are filled with all the cynical and blasphemous intent of which Malachi Mulligan is capable. The blasphemy expands to enormous proportions in the Black Mass of "Circe," where Father Malachi O'Flynn intones, "*Introibo ad altare diaboli*" (*U*,599). O'Flynn has "*his two left feet back to the front*" (*U*,599; see also Virag's denunciation, *U*,520); in his Introduction, Sir Edward Sullivan notes that both feet of the Christ-child in Plate II of his edition of *The Book of Kells* (fol. 7^{v}) are left feet, a diabolic attribute.[226] The Black Mass continues:

> THE REVEREND MR HAINES LOVE
> To the devil which hath made glad my young days.

> FATHER MALACHI O'FLYNN
> (*Takes from the chalice and elevates a blooddripping host.*) *Corpus Meum* [sic].
>
> THE REVEREND MR HAINES LOVE
> (*Raises high behind the celebrant's petticoats, revealing his grey bare hairy buttocks between which a carrot is stuck.*) My body.
>
> THE VOICE OF ALL THE DAMNED
> Htengier Tnetopinmo Dog Drol eht rof, Aiulella!
>
> (*From on high the voice of Adonai calls.*)
>
> ADONAI
> Dooooooooooog!
>
> THE VOICE OF ALL THE BLESSED
> Alleluia, for the Lord God Omnipotent reigneth!
>
> (*From on high the voice of Adonai calls.*)
>
> ADONAI
> Goooooooooood!
>
> (*In strident discord peasants and townsmen of Orange and Green factions sing* Kick the Pope *and* Daily, daily sing to Mary.). (*U*,599-600; Joyce's emphasis)[227]

The reversals of the sacred prayers here conform to the tradition that to perform or to utter something backwards is to ally oneself with diabolism or witchcraft. Jung writes: "in magical rites the inversion of letters serves the diabolical purpose of turning the divine order into an infernal disorder."[228] At a Black Mass, the Paternoster was recited in reverse, and the absolution was performed with the left hand and an inverted crucifix.[229]

The balancing of the blasphemous and sacred responses in the Black Mass in "Circe" is typical of Joyce; it should be noticed that Adonai utters both halves of the dog-God opposition. "To the devil which hath made glad my young days" is a perversion of the correct liturgical response to "Introibo ad altare Dei," viz., "Ad Deum qui laetificat juventutem meam." Stephen recites this response earlier in *Ulysses*, but he changes God's gender by replacing "Deum" with "*deam*"; his response to Lynch's query as to his destination is: "Lecherous lynx, to *la belle* dame sans merci, Georgina Johnson, ad deam qui laetificat juventutem meam." (U,433)[230] Stephen's plea to a Goddess to grant him youthful joys is expanded in Finnegans Wake, in which the poet-figure Shem is a servitor of the presiding deity, A.L.P. the Great Mother.

In Ulysses,599-600, "Alleluia, for the Lord God Omnipotent reigneth!" and its reverse are not from the Holy Sacrifice of the Mass, but rather from Rev. 19:6 (see U,183).[231] The God-dog reversal seems to run through Joyce's works. As Tindall points out, A Portrait of the Artist as a Young Man and Ulysses consistently apply the dog image to Stephen: "thinking himself God, Stephen fears dogs; yet there is a running suggestion that, fearing dogs, he fears himself, and that his portrait, as if reflected in a mirror, is that of the artist as a young dog."[232] In Finnegans Wake, Shem is a "dogpoet" (177.21). He is chided in terms which remind him of his youthful rebellion: "Do you hold yourself then for some god in the manger, Shehohem, that you will neither serve not let serve, pray nor let pray?" (188.18-.19)[233] Two further God-dog reversals are "Dogs' vespers are anending" (276.11) and "Wasn't it just divining that dog of a dag" (279.F26).

One of the rites of European witchcraft involved a ring-dance or carol performed moving to the left, with the dancers facing outwards; that is, they danced widdershins, contrary to the sun's motion.[234] Joyce employs the word "widdershins" towards the end of III.2, when Jaun, the "concelebrated meednight sunflower" (470.06-.07; a sunflower trying to follow the sun at midnight is a reversal), attempts unsuccessfully to fly; the twenty-nine girls of St. Bride's Academy cheer him on, and "the pacifettes made their armpacts widdershins" (470.36). One of the Four uses the word "widdershins" (511.01) later. Is Jaun then the horned god of the old religion ("old relogion's," 317.02), standing in the centre of a circle of worshipping witches?

In the Preface to A Rebours, written after his conversion to Catholicism, Huysmans analyses sadism and sacrilege as "the bastard of Catholicism," utterly dependent upon its original: "the power of sadism, the attraction which it offers, resides entirely in the prohibited pleasure of transferring to Satan the homage and the prayers which are due to God; it resides therefore in the non-observance of the Catholic precepts, or even in observing them in reverse (the key word à rebours), by committing, in order the more to spurn Christ, the sins He has expressly cursed: the pollution of the cult and the carnal orgy."[235] Critical opinion is divided over the question of whether Joyce is blasphemous in his works;[236] I tend to agree with those who say he is not, but even if it is his characters who commit blasphemy, does not the portrayal of such characters smack of malicious delight? Furthermore, according to Stanislaus Joyce, in his youth his brother James did himself blaspheme: "he is trying to commit the sin against the Holy Ghost for the purpose of getting outside the utmost rim of Catholicism."[237] I would imagine that the nature of Joyce's blasphemy will never be properly assessed until the nature of his Catholicism is decided, but this latter is a question which has provoked even more disagreement.[238]

What is more certain and what is moreover suggested by Huysmans' analysis is the difficulty of escaping one's own youth. Stephen Dedalus wants to fly by the nets of nationality, language, and religion in A Portrait of the Artist as a Young Man (203), but the older Stephen of Ulysses mocks the flight: "Fabulous artificer, the hawklike man. You flew. Whereto? Newhaven-Dieppe, steerage passenger. Paris and back.

Lapwing. Icarus. Pater, ait. Seabedabbled, fallen, weltering." (U,210) James Joyce came to know as well as Plato that man is a featherless biped who cannot fly[239] - he can only dream of doing so - and throughout his life he remained intensely involved artistically and personally with the nets of his youth. That he bothered to mock only proved that he was firmly entangled in the nets. The Jesuits' boast that once they had a boy in their hands he was theirs for life and for eternity is not an idle one; Joyce knew better than Buck Mulligan that one can never eradicate the marks of a sacramental education, "the cursed jesuit strain," even though "it's injected the wrong way" (U,8).[240] Religious devotion in youth arouses and develops deep unconscious responses, and even though orthodox faith is lost, the habit of the emotional response is subdued only with the greatest of difficulty. Stephen Dedalus resembles less the self styled "horrible example of free thought" (U,20) than he does Bertrand Russell's description of a man weaned out of organized religion only to fall into base superstition.[241] In Stephen Hero (206), a priest seals Stephen's fate with the words "Catholicism is in your blood." In My Brother's Keeper, Stanislaus Joyce observes of James: "he who has loved God in youth can never love anything that is less than divine. The definition may change, but the sense of service due to something outside himself sub specie aeternitatis abides."[242] Kristian Smidt, who regards Joyce's cult of art as evidence of his belief in the supernatural and of "a vast magic formula for his own secret rebirth," takes Stanislaus Joyce's analysis one step further when he writes: "having believed in the supernatural, and continuing - evidently - deep down to believe in it, he could not disavow the divine beings of the Christian Catholic Church without apotheosising rival beings to take their places."[243]

Rhetorical inversions and mirror images

Joyce might agree with Yeats, who took the phrase as his motto in the Order of the Golden Dawn, that "Daemon Est Deus Inversus."[244] But in Finnegans Wake, Joyce subordinates the diabolic implications of reversal to a more abstract and generalized theme; the demonic is only one of the forces of the collective unconscious imitated in Finnegans Wake. Reversal is a formal quality of the work, part of the technical mechanism of word transformation and transmigration. Joyce is less interested in polemical victory than he is in the tensions generated by the interaction of opposites: God and dog, God and poet (the poet is an anti-god, a devil), Jehovah and Satan, pope and heresiarch, saint and sage, Shaun and Shem. If Finnegans Wake is considered to be the literal record of a dream, then one can expect a reversal of conscious contents; on this subject, Jung writes: "we find something which has the lowest significance for the life of the unconscious standing lowest on the scale of conscious values, and vice versa. . . . what is small by day is big at night, and the other way round."[245]

The theme of backwards speech and action occurs widely in mythology and folklore, with implications other than the diabolic. To the North American Indians, backwards speech was the source of humour. The Pueblo clowns healed the sick by reciting the ritual words backwards. To certain mediaeval Jews, an antidote against magic consisted in repeating the first part of Leviticus forwards, then each word reversed, and finally the entire passage backwards. In the Kathā Sarit Sāgara, it is written that repeating a certain formula forwards endows invisibility, and backwards the power to take any shape. To ring a bell backwards is an alarm, while to fly a flag in such a fashion signals distress.[246]

Joyce uses the backwards theme before Finnegans Wake. In A Portrait of the Artist as a Young Man, Fleming writes in Stephen's book the verse which begins "Stephen Dedalus is my name." Stephen reads "the verses backwards but then they were not poetry" (Portrait,16; Joyce's emphasis). In the "Aeolus" episode of Ulysses, Bloom watches a typesetter distributing type, and he thinks that he "Reads it backwards first. Quickly he does it. Must require some practice that. mangiD. kcirtaP. Poor papa with his hagadah book, reading backwards with his finger to me" (U,122). Dignam's name is printed in reverse, implying that he is dead and undone. One might expect Joyce to enlarge upon the fact that Hebrew is written backwards with respect to English, but he does not. Part of the catechism of "Ithaca" is a comparison between Irish and Hebrew (U,687-689), but there is no mention of the backwards where one might expect it as an image of the failure of Bloom and Stephen to be reconciled to one another. In Finnegans Wake, Joyce does write "Talmud" backwards: "the best authenticated version, the Dumlat, read the Reading of Hofed-ben-Edar."[247]

In his list of rhetorical forms employed in "Aeolus," Stuart Gilbert gives the reversal of Dignam's name as an example of metathesis.[248] Other rhetorical devices from Gilbert's list that can imply reversal are chiasmus, palindrome, and hysteron proteron. Chiasmus is a common structural device in Joyce; clear examples are to be found in "Two Gallants" and "The Wandering Rocks." Gilbert's example of chiasmus in "Aeolus" is "Grossbooted draymen rolled barrels dullthudding out of Prince's stores and bumped them up on the brewery float. On the brewery float bumped dullthudding barrels rolled by grossbooted draymen out of Prince's stores" (*U*,116).[249] A similar construction in *Finnegans Wake* is used in a description of Finn MacCool: "business, reading newspaper, smoking cigar, arranging tumblers on table, eating meals, pleasure, etcetera, etcetera, pleasure, eating meals, arranging tumblers on table, smoking cigar, reading newspaper, business." (127.20-.23)[250] The rhetorical device hysteron proteron is named in *Finnegans Wake* in a passage that speaks of monarchs "riding lapsaddlelonglegs up the oakses staircase on muleback like Amaxodias *Isteroprotos*, hindquarters to the fore and kick to the lift" (498.03-.05; my emphasis). The word "muleback" is meant to draw our attention to the entire "ass" motif, and particularly to a passage in which Shem "levanted off with tubular jurbulance at a bull's run over the assback bridge" (84.02-.03). This last passage is important for an understanding of the Diagram, because, as I point out more fully in Chapter Three, "the assback bridge" refers to the *pons asinorum*, one nickname for Proposition Five of Euclid's *Elements*, Book I; implied is a reversal connected with the Diagram. Metathesis, the interchange of letters in a word, is one of the most common devices used to distort words in *Finnegans Wake* and deserves more study and space than I have been able to give it. The device is particularly important in Irish phonetics, according to O Hehir. For instance, *lúchorpán* (*lúkhurpán*, "little body") became by metathesis Ir. *leipreachán*, more familiarly known in English as *leprechaun*.[251]

Before he goes to bed in "Ithaca," Bloom looks in the mirror and sees, among other things, "The optical reflection of several inverted volumes improperly arranged and not in the order of their common letters with scintillating titles on the two bookshelves opposite" (*U*,708). That is to say, several of his books are upside down on the shelf, a condition that is a special case of the reversal theme. Joyce himself thought that placing books upside down was a feminine characteristic; Ellmann writes: "when he found some of his own books inverted, he would ask Nora and Lucia which of them had done it, smiling triumphantly if either confessed. He used to twit Weiss when he found a book upside down in Weiss's rooms, asserting that Weininger's contention about Jews as womanly men was thereby proved."[252] Among other manifestations of Bloom's femininity are his transformation in "Circe" at the hands of Bella Cohen, and, immediately preceding his observation of the upside down books, the catechetical answer speculating on the reflection of his own figure in a mirror: "From infancy to maturity he had resembled his maternal procreatrix. From maturity to senility he would increasingly resemble his paternal creator." (U,708) A further instance of the upside down theme is the inverted fashion in which Molly and Leopold Bloom sleep (U,736-737); this is another autobiographical element in Ulysses. When living in Rome in December 1906, Joyce and Nora, accustomed to sleeping apart, had to share one bed; Joyce wrote Stanislaus: "we sleep 'lying opposed in opposite directions, the head of one towards the tail of the other'."[253] I suspect that Joyce's understanding of this icon must be connected to the theme of the alternation of male and female potencies, for which his basic model is Blake's "The Mental Traveller."

It is said in Finnegans Wake that "Four things . . . ne'er sall fail" (13.20-.22), viz., H.C.E., A.L.P., Issy, and the twins Shem and Shaun (13.24-.28). These four archetypes are elaborated a few lines later, organized under the four heads "1132 A.D.," "566 A.D.," "566 A.D.," and "1132 A.D.," and bifurcated by the word "(Silent.)" to indicate a pivotal point of reflection. H.C.E. and his sons are mirror images, as are A.L.P. and Issy (13.33-14.15). The point of reflection is known as "the ginnandgo gap between antediluvious and annadominant" (14.16-.17); the Ginnunga-gap ("Yawning Gap") is the name "given in the Icelandic Eddas to the interval of timeless formlessness between world aeons."[254] It is in this interval, Joyce's text continues, that "the copyist must have fled with his scroll" (14.17-.18); in discussing the unfinished condition of The Book of Kells, I drew attention to the fact that this phrase refers to Columba's illegal transcription of the Kells manuscript, so that Joyce is again relating reversal, this time that of parents and children, to The Book of Kells.

In the Finnegans Wake Holograph Workbooks, Joyce made the entry "SNUG" and, below it, "GUNS."[255] Although this reversal is entered in the notebook in 1937 or 1938, it is nevertheless clear evidence of Joyce's interest in mirror images. In Finnegans Wake, Issy is associated with Lewis Carroll's Alice, and the recurrent emblem of this association is her mirror, her "confidante glass" (59.05), the "multimirror megaron of returningties" (582.20), her "alluring glass" (528.17-.18), in which she consults "Madge, my linkingclass girl" (459.04).[256] Stephen Dedalus had spoken of the mirror as "a symbol of Irish art. The cracked lookingglass of a servant" (U,6). It is the crack which becomes important in Finnegans Wake, for the mirror becomes a kaleidoscope ("collideorscape," 143.28), an epitome of the book itself: "Alis, alas, she broke the glass!" (270.20-.21) Joyce's use of the "collideorscape" image seems to echo Schopenhauer's assertion in an essay in Parerga und Paralipomena that "history is merely the constant recurrence of similar things, just as in a kaleidoscope the same bits of glass are represented, but in similar combinations,"[257] especially since a similar sentiment about history seems to be exhibited. The confusion of the kaleidoscope is a paradigm for the complex character composed of Alice, Lucia Joyce, and Christine L. Beauchamp (the last being a reknowned case of multiple personality[258]). Joyce associates narcissism with the schizophrenic maiden: "Nircississies are as the doaters of inversion. Secilas through their laughing classes becoming poolermates in laker life." (526.34-.36) In this case, Joyce reverses only one word, "Alices," to "Secilas," in imitation of his theme. There is another example in which the theme of the looking glass and the reversal of words is prominent: "O Evol, kool in the salg and ees how Dozi pits what a drows er" (262.F2); the reversal is slightly imperfect: "O Love, look in the glas(s) and see how Izod stip(?) what a sword re(?)."

Freud's 'Totem and Taboo': ambivalence and union

The "necessity-invention" motif appears at *FW*,133.32-.33, 207.29, 266.11-.12, 341.13-.14, and 508.14(?), but it is only at 526.34-.36, given above, that it is associated with narcissism; note, however, that "his reverse makes a virtue of necessity while his obverse mars a mother by invention" (133.32-.33), a description of H.C.E., does associate the "necessity-invention" motif with reversal. As for *FW*,526.34-.36, I believe there is sufficient proof to show that Joyce is thinking of a specific passage in Freud's *Totem and Taboo* (1913).

In this book, Freud first discusses the theory of the primal horde and the murder of the primal father, the act which purportedly was the origin of civilization. In Part III of *Totem and Taboo*, "Animism, Magic, and the Omnipotence of Thoughts," Freud considers magic (which operates by the principle of the omnipotence of thoughts) as the source of abstract speculation.[259] The principle of the omnipotence of thoughts is said to dominate the mentality of primitives and neurotics, who place too much value on mental acts; Freud considers this misplaced emphasis to be the essential factor in narcissism.[260] This very principle is recognized in our society only in art, through which a man "consumed by desires" may satisfy them: "people speak with justice of the 'magic of art' and compare artists to magicians. But the comparison is perhaps more significant than it claims to be. There can be no doubt that art did not begin as art for art's sake. It worked originally in the service of impulses which are for the most part extinct to-day. And among them we may suspect the presence of many magical purposes."[261]

Freud thinks that primitive man "transposed the structural conditions of his own mind into the external world," in a magical act older than animism (he distinguishes magic, which retains the omnipotence of thought for itself, from animism, which projects mental energy into spirits as a result of mental ambivalence and thereby lays the foundation for religion):[262]

> Thus man's first theoretical achievement - the creation of spirits - seems to have arisen from the same source as the first moral rejections to which he was subjected - the observances of taboo. The fact that they had the same origin need not imply, however, that they arose simultaneously. If the survivors' position in relation to the dead was really what first caused primitive man to reflect, and compelled him to hand over some of his omnipotence to the spirits and to sacrifice some of his freedom of action, then these cultural products would constitute a first acknowledgement of Ἀνάγκη [Necessity], which opposes human narcissism. Primitive man would thus be submitting to the supremacy of death with the same gesture with which he seemed to be denying it. [263]

That is to say, the original philosophy of man is an overweening solipsism, but the demands of reality, at first in the form of death, cause man to shift to the outer world some of the energy that he previously devoted to himself.

In his mutation of the maxim "necessity is the mother of invention" at FW,526.34-.35, Joyce combines "narcissism," "necessity," "cissy," and "sissy," changes "mother" into a word combining "daughter" and "dote" to indicate that he is referring to Issy, and shifts "invention" to "inversion," giving the sentence a psychoanalytic tinge. However, unless he had read the passage, quoted above, in which Freud opposes necessity and narcissism, Joyce would have had no reason, beyond a certain similarity in sound, to combine the two words as he does: "Nircississies are as the doaters of inversion." (526.34-.35)[264]

Freud defines a totem as "an animal (whether edible and harmless or dangerous and feared) and more rarely a plant or natural phenomenon (such as rain or water), which stands in a peculiar relation to the whole clan."[265] The word totem and its variants are frequent in Finnegans Wake. Shaun recounts his Mowgli-like boy scout education among the wolves and "the whole totem pack" (480.31) during a dialogue with the Four which also mentions a "cataleptic mithyphallic . . . this Totem Fulcrum Est Ancestor" (481.04-.05; Joyce's emphasis) and a "child's dread for a dragon vicefather" (480.25-.26). Joyce's portrayal of a child's fear of the father-totem with his "mithyphallic" organ originates in Freud's analysis of the child's animal phobia, in which the animal is the father; according to Freud, primitives similarly think of the totem as the ancestor and primal father: "if the totem animal is the father, then the two principal ordinances of totemism, the two taboo prohibitions which constitute its core - not to kill the totem and not to have sexual relations with a woman of the same totem - coincide in their content with the two crimes of Oedipus, who killed his father and married his mother, as well as with the two primal wishes of children, the insufficient repression or the re-awakening of which forms the nucleus of perhaps every psychoneurosis."[266]

H.C.E. is known as "Totumvir" (585.24) in a passage describing sexual conjugation between Humperfeldt and Anunska. There are other references to his "Veritotem" (255.14) and to a "faketotem" (516.24), and in the list of "all abusive names he was called" (71.05-.06) is included "Grunt Owl's Facktotem" (71.31; Joyce's emphasis). We also read of "christies and jew's totems" (86.23). The word totem is more obscurely placed in "The augustan peacebetothem oaks, the monolith rising stark from the moonlit pinebarren" (53.15-.16; my emphasis), in "joepeter's gaseytotum" (426.21), and in "As we there are where are we are we there from tomtittot to teetootomtotalitarian" (260.01-.02; my emphasis).[267] The last example opens FW,II.2, the chapter in which Shaun is initiated into the secrets of his mother's sexuality; "tomtittot" suggests the small, helpless child at the mother's breast, in awe of the "teetootomtotalitarian" father, the omnipotent totem which he will eventually overturn.

Freud says that the "basis of taboo is a prohibited action, for performing which a strong inclination exists in the unconscious."[268] The very word taboo had a double meaning from the beginning and was used to indicate ambivalence: "the prohibitions of taboo are to be understood as consequences of an emotional ambivalence." Freud cites studies which indicate that early languages possessed many words which could take opposite senses.[269] Such a word was taboo: "to us it means, on the one hand, 'sacred', 'consecrated', and on the other 'uncanny', 'dangerous', 'forbidden', 'unclean'. The converse of 'taboo' in Polynesian is 'noa', which means 'common' or 'generally accessible'. Thus 'taboo' has about it a sense of something unapproachable, and it is principally expressed in prohibitions and restrictions." He admits that it is difficult to find a translation for this Polynesian word, but suggests that the L. sacer embodied the concept of taboo for the Romans, as did ἄγος for the Greeks and kadesh for the Hebrews.[270]

Joyce uses the word taboo[271] in a way that suggests he may have been aware of Freud's observation that "slight modifications in the pronunciation of the antithetical 'primal word' made it possible subsequently to give separate verbal expression to the two contrary ideas which were originally combined in it."[272] In Shaun's admonition to the girls, "Tobaccos tabu and toboggan's a back seat" (435.30-.31), the words "Tobaccos" and "toboggan's" seems to grow out of "tabu" in the way Freud suggests, by modifications in pronunciation; further, there is a reversal here, for "back seat" is an anagram, by consonants, of "Tobaccos."

Joyce also uses the word taboo in association with "wolf," which he has in another place (480.30-.32) related to totem: "Warewolff! Olff! Toboo!" (225.08) One is meant to emphasize the element "tabu" in the word "tabular," as it occurs in "Twelve tabular times till now have I edicted it" (167.19), because the reference is to The Law of the Twelve Tables and Roman legal prohibitions. In addition, the surrounding context contains other references to law. The word "nefand" (167.19) is based on nefas (L., "unholy, inauspicious"); since it follows directly after the Antonius-Burrus-Caseous interlude, "nefand" should be connected with the reconciliation of opposites, which is the philosophical counterpart of Freud's antithetical primal words. The word used as the opposite of nefas in the Roman calendrical system, fas ("allowed, lawful"),[273] occurs a few lines later, in "Ubi lingua nuncupassit, ibi fas! Adversus hostem semper sac!" (167.33-.34; Joyce's emphasis. See also 31.35-.36, 443.12-.13); this can be translated literally as "where he publicly and solemnly intoned language, there it is lawful! Always consecrate against the enemy!"

The sentence following "Twelve tabular times" (167.23) is "Merus Genius to Careous Caseous!" (167.23-.24); "Merus" is the L. merus ("pure"), and "Caseous" is based on the L. careo ("to be without"). The phrase in question epitomizes an earlier description of Burrus and Caseous as foods derived from milk (161.15-.19), in which Caseous is said to be "obversely the revise" of Burrus (161.18). Because of the ambivalence of the brother-pair and because of the suggestions of taboo, Freud's observations on ambivalent words can be brought to bear. These observations are particularly fitting in regard to Question 12 of FW, I.6, which follows upon and draws to a conclusion the ideas of opposition and unity explored in the Burrus-Caseous episode (Question 11). Freud suggests that sacer is equivalent to taboo. Question 12, in its entirety, reads "12. Sacer esto? Answer: Semus sumus!" (168.13-.14; Joyce's emphasis); reading est for "esto," this translates as "Who is sacred-unholy? We are Shem-half!" The L. "Sacer" means both "sacred" and "unholy" and typifies Freud's definition of taboo. "Semus" means both "Shem" and "half"; Shem is half of the unity which is H.C.E.[274]

As we have seen, Freud equates taboo and kadesh. Joyce renders the latter as "Kidoosh" (258.05) in an Hebraic context that again speaks of opposites: "And let Nek Nekulon extol Mak Makal and let him say unto him: Immi ammi Semmi. And shall not Babel be with Lebab? And he war. And he shall open his mouth and answer: I hear, O Ismael, how they laud is only as my loud is one. If Nekulon shall be havonfalled surely Makal haven hevens. Go to, let us extell Makal, yea, let us exceedingly extell. Though you have lien amung your posspots my excellency is over Ismael. Great is him whom is over Ismael and he shall mekanek of Mak Nakulon. And he deed." (258.10-.18) I do not feel competent to expound fully on the Hebrew words which certainly stud this passage.[275] However, I am able to point out that the sentence "And shall not Babel be with Lebab?" includes the Hebrew words Babel ("confusion, Babel, Babylon") and lebab ("heart, courage"), which are mirror images. Shem is "Babel," and Shaun is "Lebab." Nek Nekulon (Shem) is trying to say that "Babel" and "Lebab" are one. Mak Makal (Shaun) answers him, calls him Ismael, the outcast, and reminds him that Nick (Satan) falls from heaven, driven out by Mick (St. Michael); that is, the good and the evil are said to be irreconcilable. Nevertheless, the words "he shall mekanek of Mak Nakulon" join the names of the two opposites, despite Shaun's disavowals; here in miniature is the pattern of the reconciliation of opposites which is one central theme of the book.

The antithetical meaning of primal words: Freud, Abel, Joyce, and Egypt

The reversal of "Babel" and "Lebab" is only one instance of a pervasive pattern of mirror images in Finnegans Wake. Before turning to a fuller examination of this pattern, it will be instructive to consider another work by Freud, the short essay "The Antithetical Meaning of Primal Words" (1910), which is essentially a review of a pamphlet of the same name by Karl Abel;[276] Freud's essay is almost entirely composed of selected quotations from Abel. He begins by quoting from his The Interpretation of Dreams (1900) a passage which, he writes, assumed full significance for him only some time later, after he had read Abel: "the way in which dreams treat the category of contraries and contradictories is highly remarkable. It is simply disregarded. 'No' seems not to exist so far as dreams are concerned. They show a particular preference for combining contraries into a unity or for representing them as one and the same thing. Dreams feel themselves at liberty, moreover, to represent any element by its wishful contrary; so that there is no way of deciding at a first glance whether any element that admits of a contrary is present in the dream-thoughts as a positive or as a negative."[277] Ancient dream interpreters, says Freud, employed this idea that a dream says the opposite of what it means. From Abel's paper, one learns that "the behaviour of the dream-work . . . is identical with a peculiarity in the oldest languages known to us." Many words in the Egyptian language mean both of a pair of opposites; furthermore, according to Abel, there are compounds which carry the meaning of only one of the pairs of opposites of which they are composed. Relativity and opposition are the sine qua non of human thought.[278]

An ambivalent word stands for neither of the opposites, but rather for the relational complex whence they issue. Only gradually was man able to think of a concept without its opposite. Determinative signs indicate which half of a pair obtains in a given case; in speech, gesture fills this role. It is the most ancient roots that are purely polar; two independent words came into being as modifications of the original only as the language evolved. For instance, the Egyptian ken (which meant both "strong" and "weak") evolved into ken ("strong") and kan ("weak").[279] Similar ambiguities are to be found, according to Abel, in Semitic and Indo-Germanic languages. In Latin, for example, altus means both "high" and "deep," and sacer, both "sacred" and "accursed"; the latter I have already considered in relation to FW,168.13. In German, Boden can mean "garret" or "ground," while bos is "bad," and bass is "good." The English verb "to lock" answers to the Ger. Lucke and Loch ("hole").[280]

Abel claims that Egyptian words "reverse their sound as well as their sense. Let us suppose that the German word 'gut' ['good'] was Egyptian: it could then mean 'bad' as well as 'good', and be pronounced 'tug' as well as 'gut'." Many examples of such sound-reversal can be found in the Semitic and Aryan languages: Ger. Topf ("pot") and Eng. "pot"; Eng. "boat" and "tub"; Ger. tauwen ("tarry") and Eng. "wait"; L. capere ("take") and Ger. packen ("seize"); Eng. "leaf" and L. folium ("leaf").[281]

Freud is not content with Abel's explanation of such reversal as a mere doubling, but sees in it a profound connection with the reversals loved by children and employed in dreams; he contends that such a connection proves his theory that dream material is archaic. He concludes with an observation that furnishes strong justification for Joyce's persistent use of sound-reversals in Finnegans Wake and for the critical view that the book is realism of the unconscious: "we psychiatrists cannot escape the suspicion that we should be better at understanding and translating the language of dreams if we knew more about the development of language."[282]

Abel speculates that if the Ger. gut were Egyptian, it could mean both "good" and "bad" and could be pronounced "gut" and "tug." This example may possibly be echoed by Joyce in the following description of Chuff: "the fine frank fairhaired fellow of the fairytales, who wrestles for tophole with the bold bad bleak boy Glugg, geminally about caps or puds or *tog* bags or bog *gats* or chuting rudskin gunerally or something, until they adumbrace a pattern of somebody else or other." (220.12-.16; my emphasis) The sound-reversal in "tog" and "gats" resembles Abel's example, and the warring opposites which the passage speaks of are in support of such a reversal. Other possible examples of antithetical meanings and sound-reversals in *Finnegans Wake* that are also given by Abel are: "*Sacer*" (168.13; Joyce's emphasis); "*altus*" (185.14; Joyce's emphasis); "under loch and neagh" (196.20); "top . . . pot" (380.21-.25), "pot . . . top" (615.09-.20), and "boat . . . Getobodoff" (370.17); "toppitt" (39.13), and "Tippoty, kyrie, tippoty" (54.12; the pair is combined in one word). The word "boat," seemingly in confirmation of my supposition, is frequently associated with matters Egyptian in *Finnegans Wake*: "I know thee, salvation boat" (26.18-.19); "boat of life" (197.28); "boat . . . the chaptel of the opering of the month of Nema Knatut" (395.22-.23); "there was a burialbattell, the boat of millions of years. . . . boat" (479.25-.31).

A related example involves a mutation of Abel's "boat-tub" pair: "and what's *duff* as a *bettle* for usses makes coy cosyn corollanes' moues weeter to wee. So till *but*again *bud*ly shoots thon rising germinal let *bod*ly chow the *fatt* of his anger and *bad*ley *bide* the toil of his *tubb*." (354.33-.36; my emphasis) This passage contains two sets of reversals, "duff-fatt" and "bettle-butagain-budly-bodley-badley-bide-tubb," which echo the names of the two opponents Butt and Taff. It is their lengthy quarrel (337.32-355.07) which comes to an end with these sound-reversals; the opposites are said to be "*ideally reconstituted*" (355.01; Joyce's emphasis) through "Viceversounding" (355.10), that is, through the sound-reversals, which reconcile them in the original antithetical word from which they have evolved.

Another of Abel's examples is the pair capere-packen, and it is clearly being used in Joyce's "cap . . . Packenham's" (39.12-.17) and "When Lapac walks backwords he's darkest horse in Capalisoot" (487.31-.32). The latter, which actually uses the word "backwords," comes in a passage in which the Four employ a magic amulet to probe the depths of Shaun's mind for the personalities who reside therein; Shaun realizes that "I'm not meself at all, no jolly fear, when I realise bimiselves" (487.18). One of the inquisitors takes up the Jacob-Esau theme and proves without a doubt that sound-reversals are connected with the brother opposition when he says: "The voice is the voice of jokeup, I fear. Are you imitation Roma now or Amor now. You have all our empathies, eh, Mr Trickpat, if you don't mind, that is, aside from sings and mush, answering to my straight question?" (487.21-.25) The "Roma-Amor" reversal has a long history. The ascetic Cathars saw it as proof that the Church of Rome had reversed God's true name, Love; their own true church, the Church of Love, was established to remedy this perversion of the Founder's original intention.[283]

Abel and Freud hearken back to Egypt as the most ancient source of ambivalent words. In Finnegans Wake, the theme of reversal is consistently associated with Egypt. One of the clearest examples is a passage that refers to pseudo-Egyptian entities such as "Nuahs" ("Shaun"), "Mehs" ("Shem"), "Pu Nuseht" ("The Sun Up"), and "tohp" ("phot," that is, "light"): "The eversower of the seeds of light to the cowld owld sowls that are in the domnatory of Defmut after the night of the carrying of the word of Nuahs and the night of making Mehs to cuddle up in a coddlepot, Pu Nuseht, lord of risings in the yonderworld of Ntamplin, tohp triumphant, speaketh." (593.20-.24) Another example of reversal in an Egyptian context is "For (peace peace perfectpeace!) I have abwaited me in a water of Elin and I have placed my reeds intectis before the Registower of the perception of tribute in the hall of the city of Analbe" (364.20-.22). The sentence is a variation of the negative confession of The Book of the Dead; "Elin" is "Nile" in reverse, and "analbe" is "Eblana," Ptolemy's name for Dublin.[284] Further, the words "peace peace perfectpeace" echo "Sandhyas! Sandhyas! Sandhyas!" (593.01), which is on the same page as the previous example. Yet another passage, again a portion of a negative confession, includes at least five reversals: "Elleb Inam, Titep Notep, we name them to the Hall of Honour. Your head has been touched by the god Enel-Rah and your face has been brightened by the goddess Aruc-Ituc. Return, sainted youngling, and walk once more among us! The rains of Demani are masikal as of yere." (237.26-.31) Here, "Demani" is "I named" backwards and looks back to "you hast ascertained ceremonially our names" (237.20-.21).

Arthur Power records that "Joyce seemed very interested in the religious aspects of Tutankhamen's tomb, which we discussed shortly after its discovery on 26 November 1922."[285] Tutankhamen appears frequently in Finnegans Wake, as a type of H.C.E.[286] His name is reversed in "going to boat with the verges of the chaptel of the opering of the month of Nema Knatut" (395.22-.23). In the passage "in the otherworld of the passing of the key of Twotongue Common, with Nush, the carrier of the word, and with Mesh, the cutter of the reed" (385.04-.06), Tutankhamen has "two tongues" because he is composed of his two sons, Shaun ("Nush") the deliverer of the Letter, and Shem ("Mesh") the writer of the Letter; he also has two tongues because the Egyptian language is based on primal ambivalences. The words "passing of the key" in the last example resonates with the passage in which H.C.E. is defined as a "tesseract" (100.35);[287] the reader is warned not to think of him as merely "a onestone parable, a rude breathing on the void of to be, a venter hearing his own bauchspeech in backwords, or, more strictly, but tristurned initials, the cluekey to a worldroom beyond the roomwhorld" (100.26-.29). That is to say, H.C.E. is more than merely his own reversed initials, E.C.H. His initials are actually given "backwords" in a similar passage, in which he "proceeded with a Hubbleforth slouch in his slips backwords (Et Cur Heli!) in the directions of the duff and demb institutions about ten or eleven hundred years lurch away in the moonshiny gorge of Patself on the Bach" (73.18-.21; Joyce's emphasis). H.C.E. in his tomb is backwards, and he consequently disintegrates into the "deff and demb" or Taff-Butt opposites.

James Atherton has pointed out that Joyce links Egypt and sound-reversals with Lewis Carroll.[288] Joyce's curious parody of the Egyptian negative confession, "I have not mislaid the key of Efas-Taem" (311.12), in which "Efas-Taem" is the reverse of "Meat-Safe," indisputably echoes the following pseudo-etymological whimsy in C. L. Dodgson's essay "The New Belfry of Christ Church, Oxford" (1873): "the word 'Belfry' is derived from the French bel, 'beautiful, becoming, meet', and from the German frei, 'free, unfettered, safe'. Thus the word is strictly equivalent to 'meat safe' to which the new Belfry bears a resemblance so perfect as almost to amount to coincidence."[289] Atherton cannot explain why Joyce uses this particular example (which does not strike one as especially clever), or why Carroll is associated with Egypt; I can do no better. He points out that Joyce connects Carroll as a creator-god with Atem, who created man by spitting or masturbating;[290] it should be added that "Meat" is an anagram of "Atem." This connection is borne out in "A spitter that can be depended on. Though Wonderlawn's lost us for ever" (270.19-.20). Although this passage establishes the link, we still do not know why it is made. The only suggestion I can offer is that Carroll uses reversals here and there in his writings; furthermore, his most famous character climbs into a mirror world. That Carroll-Dodgson was a split personality might lend further importance to the association for Joyce.[291]

Shem and Shaun: mirror images

Earlier, I remarked that Shem as Plato's Other is associated with Yeats's Lunar hour-glass, while Shaun as the Same corresponds to the Solar diamond. The entire pattern of rhetorical and linguistic reversals which I have just discussed should properly be viewed as forming part of the one major opposition in *Finnegans Wake*, that between Shem and Shaun. It should come as no surprise that this opposition is itself conceived to be a reversal. In a letter to Harriet Shaw Weaver in 1924, Joyce writes: "I am sorry I could not face the copying out of Shawn [sic] which is a description of a postman travelling backwards in the night through the events already narrated. It is written in the form of a *via crucis* of 14 stations but in reality it is only a barrel rolling down the river Liffey."[292] Because of the association he makes between what was to become *FW*,III.2, which he says is written backwards, and the events leading up to the Crucifixion, this letter offers strong support for my thesis that Joyce means to reverse with his own Diagram the Crucifixion portrayed in the quincunx of the *Tunc* page.

The phrase "through the events already narrated" in Joyce's letter confirms what can be deduced from the passages in *Finnegans Wake* concerned with Shaun's barrel, namely, that Shaun repeats in the second half of the book what Shem writes down in the first half.[293] At the conclusion of the Ondt and the Gracehoper fable, the Four ask Shaun if he can decipher Shem's Letter "while still in the barrel" (419.18). Although he angrily denounces the obscene Letter, Shaun is bound to confess that he is "letter potent to play the sem backwards like Oscan wild or in shunt Persse transluding from the Otherman" (419.23-.25); he clearly states that he is Shem ("sem") "backwards," and that this reversal is connected with the Letter. Presumably, Oscar Wilde, an invert and a narcissist, contributes to the reversal theme, while "Otherman" reverberates with Plato's Same-Other pair. The barrel reappears a few pages later; Shaun, still in his "barrel" (426.31), rolls "buoyantly backwards" (426.34). And in an Egyptian context previously noted in connection with the reversal of Dodgson's "Meat-Safe," the barrel becomes the prop of an underworld deity in the invocation "O, lord of the barrels, comer forth from Anow (I have not mislaid the key of Efas-Taem)" (311.11-.12).[294]

The power that Shem exerts over Shaun is demonstrated as well in the course of one of Shaun's answers to the Four. He claims that he "can seeze tomirror in tosdays of yer" (408.19); that is, he can see and seize tomorrow, which is a mirror of today, in the todays of yesterday, and perhaps he is relying on Vico's insights on the cyclic nature of history. Shaun goes on to say that "what Sim sobs todie I'll reeve tomorry" (408.21-.22); that is, Shem's ("Sim") melancholy tales of death written today will be the dream (Fr., *rêve*) and the life which

Shaun experiences backwards tomorrow ("tomirror"), when he becomes the new H.C.E., for the Letter that Shem writes is the plan by which H.C.E. is constructed.

That Shaun in the second half of the book reverses what Shem does in the first half finds confirmation in the large structural patterns informing Finnegans Wake. Clive Hart[295] demonstrates that Book I, legends, is mirrored in Book III, dream-visions; Book I commences with a birth (28-29) and concludes with a death (215-216), while the death (403) and birth (590) occur in reverse order in Book III. The two books are said to be united in the dreams and legends of Book II. Corroboration for this view of the book's structure is given in a remarkable dream Joyce describes in a letter: "I had a rather strange dream the other night. I was looking at a Turk seated in a bazaar. He had a framework on his knees and on one side he had a jumble of all shades of red and yellow skeins and on the other a jumble of greens and blues of all shades. He was picking from right and left very calmly and weaving away. It is evidently a split rainbow and also Parts I and III. And now may Allah who is infallahble guide this epistle of his lowliest and shed upon his sconce the quietude of the carpetweaver."[296] This seems to be saying that if the split rainbow is Books I and III, then the unified rainbow is Book II, and the exact point from which it radiates is the Diagram (see "rayingbogeys," 304.09). As the rainbow, the Diagram reconciles the opposites Shem and Shaun, who switch margins when it occurs. Isaac Newton is mentioned just after the Diagram (293.17), because he demonstrated that white light can be broken into the rainbow colours. If the rainbow is to be identified with the Diagram, then it is because the Diagram occurs at the zenith of A.L.P.'s potency. The rainbow finally is unified into white light during the Patrick-Berkeley dialogue (610.34-612.36), when H.C.E. is about to be reborn, and A.L.P. is dying.

The reconciliation of opposites

It is generally agreed that Shem and Shaun together comprise the new H.C.E., and the question of the coincidence of opposites in *Finnegans Wake* has generated considerable critical comment.[297] H.C.E. falls when Shem and Shaun war; he rises when they unite. In view of the role of Gnostic dualism in *Finnegans Wake* (see Appendix B), it is questionable that the reconciliation is ever more than temporary, but that it does, in fact, occur is beyond doubt. At the end of their dialogue, the twins as Butt and Taff become "*one and the same person* . . . *umbraged by the shadow of Old Erssia's magisquammythical mulattomilitiamen*" (354.08-.10; Joyce's emphasis). The primary instrument of reconciliation in the book is the Diagram, which belongs to A.L.P., who is the source of all appeasement. As the Prankquean and the Great Mother (see Chapter Five), she controls and switches the twins, and her womb, the Diagram, is the locus "where extremes meet" (440.34-.35). The Diagram is composed of lesser geometrical figures, such as Solomon's Seal, the squared circle, and the *vesica piscis*, and, as I show in Chapters Three and Four, these are all symbols of the *coincidentia oppositorum*.

Nicholas of Cusa and Giordano Bruno are Joyce's philosophical authorities for the concept of the reconciliation of opposites (see Chapter Five for further remarks on Cusa and Chapter Three for Bruno). Joyce credits Cusa with the idea in plain terms in *Finnegans Wake*: "let the centuple celves of my egourge as Micholas de Cusack calls them . . .

by the coincidance of their contraries reamalgamerge in that indentity of undiscernibles." (49.33-50.01) Analytical psychology confirms the rightness of Joyce's decision to make the doctrine which reunites the "egourge" (H.C.E.) so prominent a feature of his book of the night and the unconscious mind. Writing from the viewpoint of practical psychological healing, Jung testifies that "individuation is a 'mysterium coniunctionis,' the self being experienced as a nuptial union of opposite halves and depicted as a composite whole in mandalas that are drawn spontaneously by patients."[298] Alchemy is one of the important sources of Jung's ideas about the coincidentia oppositorum, and, as I show, an understanding of alchemy and the squared circle elucidates the patterns of Finnegans Wake. Jung's disciple Erich Neumann characterizes the archetype itself as the form in which all opposites coincide.[299]

The possibility of reconciliation in Finnegans Wake is perhaps present even when a gulf appears to divide the opposites. The Justius-Mercius dialogue (187-195; these names also translate the Hebrew terms for the fourth and fifth Sephiroth in the Cabbala[300]) is an example of such widely separated opposites; the twins uncompromisingly confront one another with the alternatives of justice and mercy, death and life. However, when the dialogue is viewed in light of the Renaissance tradition concerning justice and mercy, it can be appreciated that reconciliation is inevitable. Edgar Wind describes that tradition in these terms:

> in Cusanus's and Ficino's and Pico's idea of God (and on this point they were supported by a solid theological tradition) the opposites of justice and mercy coincide. 'Thy anger is love, Thy justice mercy.' It is man's limitation to conceive of them as 'divided': and as long as he fails to recognize his limitation, man (in the Neoplatonic view) is unable to rise to the idea of God, and falls short of his own perfection. His natural weakness, as a creature below the moon, may force him to alternate and compromise between the opposites, this being a temporal way of mediating between them. Yet the aim of mediation

> is union; and while turning his face from one side to the other, the sage should comprise both sides at once.[301]

Considering Joyce's interest in Cusa, it is probable that he was aware of the justice-mercy coincidence, and it is likely that H.C.E. has a kinship with the God of Cusa (although, as I show in Chapter Five in considering Cusa's infinite sphere, so does A.L.P.).

The regeneration of H.C.E. through reversal: the Dreaming Back

One final example of reversal in *Finnegans Wake*: the very regeneration of H.C.E., which proceeds out of the reconciliation of the warring opposites, can be seen as a reversal. By dreaming back into his own past, from his death (403) to his birth (580.13), H.C.E. revitalizes himself. Hart compares this reversal to the processes Yeats calls the *Dreaming Back*, the *Return*, and the *Shiftings*; in *A Vision*, these processes are after death states in which the soul relives its life backwards and prepares for its next incarnation. According to Hart, the re-experiencing of his own past results in gnosis for H.C.E.: "the whole of Book III, including the regress in III.4 when Shaun begins his own epicyclic *Dreaming Back*, is then, in these terms, a mystical pilgrimage of Earwicker's spirit, seeking salvation through self-knowledge; working back toward an account of his own genesis."[302]

Although it would buttress my own observations about reversals in *Finnegans Wake* if his remarks were completely accurate, I am afraid that Hart is guilty of a slight misapprehension here. Yeats does not say that there is a strictly chronological reversal in the *Dreaming Back* state, but that the events of the life return in the order of their intensity (and this is a passage which Hart quotes himself):

> in the *Dreaming Back*, the *Spirit* is compelled to live over

> and over again the events that had most moved it; there can be nothing new, but the old events stand forth in a light which is dim or bright according to the intensity of the passion that accompanied them. They occur in the order of their intensity or luminosity, the more intense first, and the painful are commonly the more intense, and repeat themselves again and again. In the Return, upon the other hand, the Spirit must live through past events in the order of their occurrence, because it is compelled by the Celestial Body to trace every passionate event to its cause until all are related and understood, turned into knowledge, made a part of itself.[303]

The process of purgation which Yeats describes is common to many religious systems, particularly those with Gnostic inclinations. The Bar-do or after death state described in The Tibetan Book of the Dead (Bardo Thodol) is thought to be filled with hallucinations that result from the previous life, though there are no indications that this state is to be conceived as occurring backwards.[304] The Egyptian rituals in The Book of the Dead are another example of the journey after death, as are the numerous other variants of the great myth of death and resurrection. The only variant of the rebirth archetype in which I have been able to discover the reversal theme is the yogic symbolism of death to the mundane state and rebirth into a transcendent state. The yogi is said to reverse ordinary actions; he stops body motion (āsana), breathing (prāṇāyāma), stream of consciousness (ekāgratā), and the flow of semen. These death-like reversals initiate the yogi into a new, higher life.[305] The many references in Finnegans Wake to religious and philosophical systems which attempt to arrive at such a rebirth suggest that Joyce implies a similar illuminative gnosis in his own resurrection pattern. The Resurrection of H.C.E. depends upon the Diagram and the lozenge, which reverses the quincunx of Crucifixion in the Tunc page of The Book of Kells.

CHAPTER THREE - "ELEMENTATOR JOYCLID": JOYCE AND EUCLID

Geometrical imagery in literature

The Diagram at the centre of Finnegans Wake is essential to an understanding of the book; with the minor exception of the dotted lines AP and LP, this Diagram is identical with the figure illustrating Euclid's First Proposition in the Elements, Book I. That geometry and a geometrical figure are so prominent in a literary work is not at all novel; other writers have explored geometry as a literary topic. For instance, Donne's comparison of two lovers to the two feet of a compass in "A Valediction: Forbidding Mourning" (1633) is neither violent nor original.[1] A mysterious Bedouin visits Wordsworth in a dream and reveals the dual truths of geometry and poetry; an entire book of The Prelude (1850) is a meditation on these "twin labourers and heirs of the same hopes."[2] Resuscitating the old pseudo-Hermetic formula for God, Shelley calls poetry itself divine, "at once the centre and circumference of knowledge."[3] The last shreds of Nerval's Le Rêve et la vie (1855), discovered on the poet's person after he despaired of life, were, according to Arthur Symons, "interrupted with Kabbalistic signs and 'a demonstration of the Immaculate Conception by geometry.'"[4] Charles Lutwidge Dodgson literally led a double existence; he was a mathematician under his original name, but as Lewis Carroll, he was a writer of children's books, and neither person would speak to the other. In his essay "The Dynamics of a Parti-cle" (1865), Dodgson employs Euclid's Third Postulate as the occasion for merriment. The original, "that a circle may be described with any centre, at any distance from that centre, that is, with any given line drawn from the centre as radius," becomes, in Dodgson's version, "that a controversy may be raised about any question, and at any distance from that question."[5] A more recent practitioner of two arts, Wyndham Lewis, writes of his preference for "burying Euclid deep in the living flesh - that of Mr. Eliot or of Mr. Pound - rather than, at this time of day, displaying the astral geometries of those gentlemen."[6]

When geometry and poetry are considered in relationship, Yeats especially comes to mind, for in *A Vision*, he bases an entire mythology of poetic practice on geometry. Many have faulted Yeats on this artistic decision, including Joyce, whose reaction to the work was recorded by Eugene Jolas: "I read *The Vision* [sic] to him, and he was deeply absorbed by the colossal conception, only regretting that 'Yeats did not put all this into a creative work.'"[7] Yeats had been deeply influenced by the geometrical mysticism of MacGregor Mathers; in *A Vision*, he makes an appeal to his predecessors that serves as an apology for his own work:

> Some, perhaps all, of those readers I most value, those who have read me many years, will be repelled by what must seem an arbitrary, harsh, difficult symbolism. Yet such has almost always accompanied expression that unites the sleeping and waking mind. One remembers the six wings of Daniel's angels, the Pythagorean numbers, a venerated book of the Cabala where the beard of God winds in and out among the stars, its hairs all numbered, those complicated mathematical tables that Kelly saw in Dr. Dee's black scrying-stone, the diagrams in Law's *Boehme*, where one lifts a flap of paper to discover both the human entrails and the starry heavens. William Blake thought those diagrams worthy of Michael Angelo, but remains himself almost unintelligible because he never drew the like. We can (those hard symbolic bones under the skin) substitute for a treatise on logic the *Divine Comedy*, or some little song about a rose, or be content to live our thought.[8]

Joyce may have feared that he himself would remain almost unintelligible, for he uses a Diagram in *Finnegans Wake* that is in many ways inspired by

Yeats; if Joyce regretted that "Yeats did not put all this into a creative work," he made certain that Yeats's insights would be realized in one by borrowing them freely for his own work.

"The Sisters" and the gnomon

Finnegans Wake is not the first occasion of geometrical and mathematical reference in Joyce's works. In the penultimate episode of Ulysses, the last of the inverted books on Leopold Bloom's bookshelves is "Short but yet Plain Elements of Geometry written in French by F. Ignat. Pardies" (U,709). Throughout "Ithaca," mathematical imagery is marshalled in describing Bloom's plight, for example, in "Reduce Bloom by cross multiplication of reverses of fortune, from which these supports protected him, and by elimination of all positive values to a negligible negative irrational unreal quantity" (U,725).[9] This imagery is in accordance with the intention Joyce set out in a letter to Frank Budgen: "I am writing Ithaca in the form of a mathematical catechism."[10]

One of the most striking geometrical references in Joyce is his use of the word gnomon in the first paragraph of the first story of Dubliners, "The Sisters." The reader is introduced to the thoughts of the young boy, who is mystified by the approaching death of his hierophant, the old, broken priest, James Flynn: "Every night as I gazed up at the window I said softly to myself the word paralysis. It had always sounded strangely in my ears, like the word gnomon in the Euclid and the word simony in the Catechism. But now it sounded to me like the name of some maleficent and sinful being. It filled me with fear, and yet I longed to be nearer to it and to look upon its deadly work." (Dubliners, 9; Joyce's emphasis)

The three words "paralysis," "gnomon," and "simony," had at first attracted the boy's attention because of sound, not meaning, of which he remains largely unaware. Now, the word "paralysis" has taken on a fearful aspect, by virtue of its unexplained association with the impending death of the priest, who, we learn in the first sentence, has had his third stroke. His fantasy fired by his exclusion from the world of adult secrets, the boy invents his own explanations in an attempt to decode a cryptic world. The spirit of the old priest comes to him in a dream and wishes to confess, as if the boy has become the priest. The boy wonders "why it smiled continually and why the lips were so moist with spittle," but then he remembers "that it had died of paralysis," and he feels that he too "was smiling feebly as if to absolve the simoniac of his sin" (Dubliners,11). Here, two of the three strange words are applied to the priest, but there is no evidence in the story that simony has ever been committed. The overpowering influence of his imagination is exposed when he goes with his aunt to pay last respects to the corpse, which in no way resembles the spirit in the dream. At first, he is possessed of the fancy that, as in his dream, the priest is smiling, "But no. When we rose and went up to the head of the bed I saw that he was not smiling." The face of the corpse he describes as "truculent, grey and massive," but there is no trace of spittle, which clung to the lips of the dream mask (Dubliners,14). The boy has made a dull and ordinary death (how mundane is the final interview with the sisters!) into something exotic. This tendency to romanticize explains Cotter's earlier reference to the boy as "that Rosicrucian" (Dubliners,11). It is Cotter who first aroused his sense of mystery, and it is of Cotter that the boy reveals, "I puzzled my head to extract meaning from his unfinished sentences" (Dubliners, 11). The old priest completed the boy's education by teaching him to find difficulties where none previously existed (Dubliners,13).

In the opinion of Thomas E. Connolly and others, the word "gnomon," because of its association with the words "paralysis" and "simony," must carry a negative connotation. According to this interpretation, the gnomon is a "remainder after something else has been removed," and it serves as a metaphor of the paralysis and deficiency of the failed priest, James Flynn, who in turn paralyses Dublin society. Connolly supplies what appears to be conclusive proof that Joyce means the word in this negative sense by quoting a definition of gnomon from John Casey's popular edition of The Elements of Euclid: "in any parallelogram the figure which is composed of either of the parallelograms about a diagonal and the two complements . . . is called a gnomon. Thus, if we take away either of the parallelograms AO, OC from the parallelogram AC, the remainder is called a gnomon."[11]

Without supplying a reason for his statement, Connolly says that Casey's edition of Euclid is the one "that Joyce most likely knew."[12] I am unable to confirm this opinion. The only reference in all Joyce's works to Casey is in Finnegans Wake; although Casey is important for Joyce's last work, he is not necessarily the source for material in a book published twenty-five years earlier. In Finnegans Wake, Joyce cites other editors of Euclid, including Isaac Todhunter, whose version was even more widely known than that of Casey. In Todhunter's edition of the Elements, a different and rather neutral definition of the gnomon is given: "in every parallelogram, any of the parallelograms about a diagonal, together with the two complements, is called a Gnomon."[13] It is impossible to derive a negative interpretation of the gnomon from this definition; moreover, there is a hint of the true meaning of gnomon, which is accessible to anyone willing to pursue the history of mathematics just beyond the simplifications of a school primer (although it must be kept in mind that Joyce often worked from such sources).

Originally, gnomon was the name of the simplest possible clock, a vertical stake in the ground, which casts a shadow as the sun moves.[14] By association, the word came to mean an instrument similar to a carpenter's square.[15] When the ancient Greeks investigated the properties of areas, they observed that at least four dots are required to outline a square. To obtain the square of the next higher order, a line of five dots must be added to two sides of the original square, and so on through the series of increasingly larger squares. The added dots are called a gnomon by no less an authority than Aristotle.[16] By natural evolution, the term came to be applied to distinct areas of a square, either to the area remaining after a square was cut out, or to the figure added to one square to make a larger square; Aristotle states: "there are some things which undergo increase but yet not alteration. The square, for instance, if a gnomon is applied to it, undergoes increase but not alteration, and so it is with other figures of this sort."[17] It was Euclid who extended the received definition to any parallelogram; the gnomon is the basic analytical instrument of Book II of the Elements, where it is employed in the inquiry into the determination of areas. Finally, Heron of Alexandria generalized the definition of gnomon to "that which, when added to anything, number or figure, makes the whole similar to that to which it is added."[18]

It should now be evident that the more usual meaning of gnomon implies an addition of one form to another to make a larger unity, rather than a subtraction leaving a remainder, as Connolly and the others assume. Furthermore, the term was endowed with an epistemological sense. Philolaus states that "number makes all things knowable and mutually agreeing in the way characteristic of the gnomon." His modern editor, Boeckh, suggests that Philolaus took the gnomon-square relationship as a metaphor of the harmony and unification that results when the act of knowing conjoins the knower with the known.[19]

The two related concepts of gnomon - as an addition and as an act of knowledge - support my interpretation of "The Sisters" as the account of a boy's fanciful attempts to understand his world. The gnomon which is added in the story is his own imaginative faculty, and what it is added to is the reality of experience which he encounters. Mind embraces the world, and from their union springs an epiphany. Uncle Jack's advice, "Let him learn to box his corner" (Dubliners,11), unknowingly implies that the world is an incomplete corner, and that the boy must learn to make it square and complete by becoming the gnomon himself (the phrase is remembered in FW,465.03-.04 as "He's Jackot the Horner who boxed in his corner"). The boy is weak and capable of only a partial perception, but, nevertheless, he is the germ of the artist who will one day read the signatures of all things. For the present, he is at the mercy of words, and his mind is a filter of experience that confuses as much as it clarifies; however, his destiny is to become the poet wielding language, the potent instrument of divination.[20]

Euclid's First Proposition and Joyce's Diagram

Later in this chapter, I argue that Joyce regards the geometrical Diagram as a device for stimulating the imagination. My interpretation of "The Sisters" is consistent with this view. However, while the geometrical imagery in "The Sisters" consists in a few brief references, in Finnegans Wake, it assumes much greater proportions, and it all revolves about the Diagram. This Diagram is essentially identical with the figure which illustrates the First Proposition in Book I of Euclid's Elements. Joyce makes this identity clear in a letter: "I have done a piece of the studies, [coaching Λ how to do Euclid Bk I, 1."[21] In Casey's edition, the First Proposition is given as "on a given finite right line (AB) to construct an equilateral triangle."[22] There are two differences between the two figures. By adding the two dotted lines AP and LP, Joyce has two triangles in his Diagram, whereas there is but one in Euclid's. The lettering is also different, as in Figures 4 and 5.

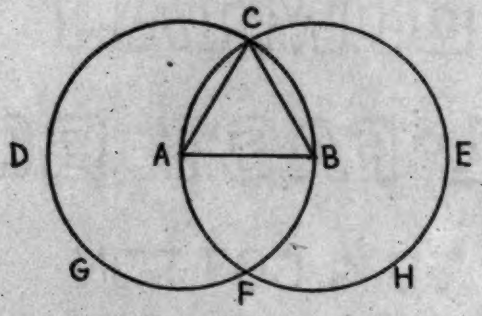


Fig.4. Euclid's First Proposition, after Casey.[23]

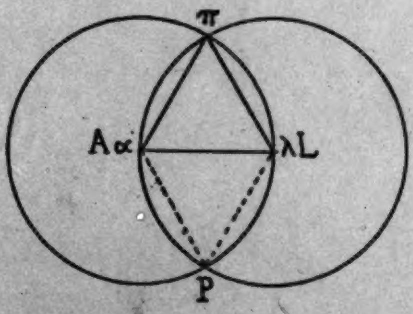


Fig.5. The Diagram in Finnegans Wake,293.

In FW,II.2, Joyce echoes almost every phrase in Euclid's proof for the First Proposition, along with many preliminary definitions, postulates, and axioms, as Fritz Senn has shown in his excellent essay, "The Aliments of Jumeantry." For instance, the statement of the Proposition itself Joyce subverts into "Problem ye ferst, construct ann aquilittoral dryankle Probe loom! . . . Concoct an equoangular trillitter" (286.19-.22).[24] Euclid's instruction "with A as centre, and AB as radius, describe the circle BCD" becomes in Joyce "With Olaf as centrum and Olaf's lambtail for his spokesman circumscript a cyclone" (294.08-.10). And, to give a third of the many examples adduced by Senn, Euclid's "with B as centre, and BA as radius, describe the circle ACE, cutting the former circle in C. Join CA, CB" is transformed by Joyce into "there's tew tricklesome poinds where our twain of doubling bicirculars, mating approxemetely in their suite poi and poi, dunloop into each the ocher" (295.30-.33).[25]

Mr. Senn is of the opinion that Joyce's first draft of FW,II.2 "translated the sober diction of the textbook so freely into Wake language that it is not essential to determine which edition of Euclid he relied on."[26] Unfortunately, as he freely states, he was unable to examine the edition of Euclid "that Joyce most likely knew," Casey's, and had to rely on that of Isaac Todhunter. He has found Todhunter's name in Finnegans Wake, in "Sare Isaac's" (293.17), "toadhuntered" (293.F2), and "doddhunters" (283.25-.26), so he is justified in quoting him in his article; however, as I show, Joyce must have known more than one edition of Euclid.[27] If Senn had had access to Casey, he would have seen that passages such as "With Olaf as centrum and Olaf's lambtail for his spokesman circumscript a cyclone" (294.08-.10)[28] originate in Casey, in whom the corresponding passage reads "with A as centre, and AB as radius, describe the circle BCD," rather than in Todhunter, in whom it has a slight, but significant, difference in phrasing: "with centre A and radius AB, describe the circle BCD."[29]

John Casey's edition of the Elements is cited directly in Finnegans Wake as "Casey's Euclid" (206.12-.13), and his name, in "Casey's frost book" (286.09), is given a few lines before the enunciation of the First Proposition (286.19-.22) and the description of Euclid's work as "The aliments of jumeantry" (286.L4).[30] Mr. Senn finds echoes of Book I, Definitions 1, 2, and 24 (as they are numbered in Todhunter) in FW, II.2.[31] If he had been able to consult Casey, whose version of the Definitions differs, Senn could have added to his list Definitions 10 and 29. Definition 10 reads: "the two lines are called the legs, and the point the vertex of the angle."[32] Joyce employs this terminology in "the parilegs of a given obtuse one" (284.02) and in "Vertex" (293.L2; Joyce's emphasis); Todhunter does give the word vertex, but not legs.[33] Definition 29 in Casey reads: "a quadrilateral whose four sides are equal is called a lozenge."[34] Casey also has occasion to use the word lozenge in the first of the exercises for solution that follow the First Proposition: "if the lines AF, BF be joined, the figure ACBF is a lozenge."[35] I have observed that Joyce's Diagram differs from Euclid's in that it adds the lower triangle ALP; if the directions in Casey's exercise are followed, the resulting figure is identical to Joyce's Diagram, except that Joyce's lower triangle is outlined in dots. The word lozenge is used twice by Joyce (148.12, 299.28); it is one of the terms that describes that part of the Diagram formed by the two triangles with bases together. Joyce also calls this diamond shape a rhombus: "The hatboxes which composed Rhomba, lady Trabezond . . . up which B and C may fondly be imagined ascending" (165.21-.24); "now at rhimba rhomba, now in trippiza trappaza, pleating a pattern Gran Geamatron showed them" (257.03-.05); "As Rhombulus and Rhebus went building rhomes one day" (286.F1), which is a footnote to "Concoct an equoangular trillitter" (286.21-.22), Joyce's statement of Euclid's First Proposition. As far as the word rhombus is concerned, it is not in Casey, but it is in Todhunter.[36]

Joyce describes his Diagram as a hexagon in "if you flung her headdress on her from under her highlows you'd wheeze whyse Salmonson set his seel on a hexengown" (297.01-.04). The two triangles in the Diagram can be imagined sliding towards one another until they form Solomon's Seal, the ancient symbol of the union of male and female (see Chapter Four of the present work). However, there might also be a reference here to Proposition Fifteen of the Elements, Book III, namely, "in a given circle (ABCDEF) to inscribe a regular hexagon."[37] In both Casey's and Todhunter's editions, Figure 6 accompanies this Proposition (Casey's lettering; Todhunter's differs slightly):

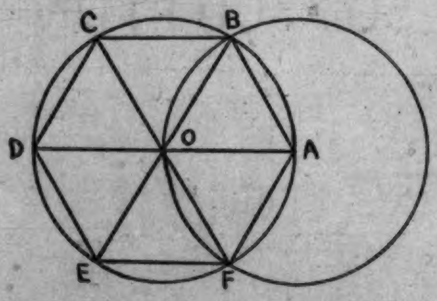


Fig.6. Euclid, Book III, Proposition 15, after Casey.[38]

It will be appreciated that this figure bears a close similarity to the one for the First Proposition of Book I (see Figure 4) and to Joyce's

Diagram.

In his Note B, which is not part of the *Elements* proper, Casey has occasion to cite William Rowan Hamilton, "the discoverer of the Calculus of Quaternions."[39] Joyce would not have learned of Hamilton from Casey, who discusses only technical proofs, but he may have seen Casey's note. Hamilton is named three times in *Finnegans Wake*.[40] H.C.E. is described "by his ain fireside, wondering was it hebrew set to himmeltones or the quicksilversong of qwaternions" (138.01-.02). To satisfy the curiosity of the Anglo-Irish public as to the meaning of quaternions, Hamilton composed *Letters to a Lady*, in which he explained that the word is taken from the Bible; Herod is said to deliver Peter to "four quaternions of soldiers" (Acts 12:4).[41] Perhaps this explanation is the reason why Joyce associates "himmeltones" and "qwaternions" with "hebrew." Hamilton is also named twice in mathematical contexts in the Diagram chapter, as "himmulteemiously" (285.10) and as "rovinghamilton" (300.27-.28). Incidentally, Hamilton is said to have been struck with the idea of quaternions while walking in Phoenix Park in 1842: "he happened to have a penknife with him, and cut the formula in stone on the bridge across the Liffey, now called Quaternion Bridge."[42] This is the kind of anecdotal material which is perfect for a book set largely in Phoenix Park, but I have been unable to trace a reference in *Finnegans Wake* that connects Hamilton and Phoenix Park.

It has been suggested that in *Finnegans Wake* a second geometry problem, distinct from Euclid's First Proposition, is propounded in the words "Show that the median, hce che ech, interecting at royde angles the parilegs of a given obtuse one biscuts both the arcs that are in curveachord behind" (283.32-284.04). Diane Thompson and Paul Thompson argue that this passage must in some way refer to a triangle inscribed in a circle. After examining the various solutions that will account for a median, an intersection at right angles, equal sides, and the bisection of arcs, however, they conclude that Joyce is depicting a triangle "hce" inscribed on a sphere, with "two great circles, the medians, intersecting at right angles," and dividing "the sphere into four equal quadrants."[43] In a later article, Clive Hart agrees that if the triangle is obtuse, the solution must be spherical. However, the words "interecting at royde angles the parilegs" he interprets as: "meeting two sides at the apex and making a right angle with each of them." For this to be true, the triangle must be a hemisphere, with each side a third of the circumference of a great circle (that is, a circle that passes through both poles of a sphere). Each angle of the triangle is then one hundred and eighty degrees, and the median meets each side at the apex in a right angle. But this median is part of another great circle lying on the sphere at right angles to the first circle. The solution is therefore: great circles bisect one another. Hart claims that his solution is relevant to the overall structure of Finnegans Wake, as he delineates it in his Structure and Motif in 'Finnegans Wake'.[44] Surely there is a fault in the preceding line of reasoning. If each side of the triangle is a third of the circumference of a circle, then how can the other circle meet each side at the apex in a right angle if it only bisects, not trisects, the original circle? Apart from this contradiction, the solutions of Thompson and Thompson and of Hart suffer from the necessity of having to introduce a diagram other than the one Joyce gives us on FW,293.

The difficulty in trying to understand the problem at FW,283.32-284.04 is that it is itself contradictory. One possible translation of this problem is "show that the median which intersects at right angles the two legs of the obtuse angle in a triangle bisects the arcs of which the legs are chords." A median is commonly defined as the line running from the vertex of a triangle to the centre of the opposite side; in ordinary geometry, it is impossible for one median to intersect two legs of the same triangle at right angles, as Joyce's problem suggests. If we take a slight liberty with the passage and amend it so that there are two medians, then a solution immediately presents itself that involves the Diagram as it is given in the text. The only change is that the two medians have to be drawn in, as in Figure 7.

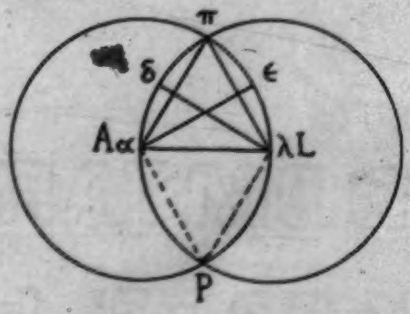


Fig.7. A possible solution
to FW,283.32-284.04.

The medians $\alpha\epsilon$ and $\lambda\delta$ bisect lines $\lambda\pi$ and $\alpha\pi$ at right angles; in accordance with the problem, they also bisect the arcs $\lambda\pi$ and $\alpha\pi$ behind the chords $\lambda\pi$ and $\alpha\pi$. However, apart from the fact that two medians are required, there is the further difficulty that the triangle $\alpha\lambda\pi$ is equilateral and contains no obtuse angle, as the problem demands.

The only obtuse angles in Joyce's Diagram are angles $\pi\alpha P$ and $\pi\lambda P$, which are not part of a triangle, but of the quadrilateral $\pi\alpha P\lambda$ (unless line πP is drawn, cutting the quadrilateral vertically into two obtuse triangles). Working from these two obtuse angles, the "median" (284.01) can be interpreted as line $\alpha\lambda$, which "interacts" ("interecting," 284.01) at points α and λ with the two sets of two lines, $\alpha\pi$ and AP, and $\lambda\pi$ and LP ("parilegs," 284.02), and bisects ("biscuts," 284.02-.03) the arcs $\pi\alpha P$ and $\pi\lambda P$. The difficulty with this solution is that no right angles are involved ("royde angles," 284.01-.02). The great advantage, however, is that it can be applied to the Diagram exactly as Joyce gives it, with no additions.

In my opinion, the second alternate solution I have given most nearly answers the problem set out in FW,283.32-284.04. There seems to be confirmation for this view in a description of H.C.E. in the "second position of discordance" (564.01-.02):

> Is it not that we are commanding from fullback, woman permitting, a profusely fine birdseye view from beauhind this park? Finn his park has been much the admiration of all the stranger ones, grekish and romanos, who arrive to here. The straight road down the centre (see relief map) bisexes the park which is said to be the largest of his kind in the world. On the right prominence confronts you the handsome vinesregent's lodge while, turning to the other supreme piece of cheeks, exactly opposite, you are confounded by the equally handsome chief sacristary's residence. Around is a little amiably tufted and man is cheered when he bewonders through the boskage how the nature in all frisko is enlivened by gentlemen's seats. (564.06-.17)[45]

If H.C.E. is imagined as a giant form prostrate over Dublin, then his buttocks correspond to Phoenix Park, according to this passage; each cheek (a word which contains the letters h, c, and e) is one of his sons and also one of the circles in the Diagram. The "right prominence" is possibly the point π as well, while the "chief sacristary's residence" is the point P; Shaun is the angel in heaven, while Shem is the devil in hell (cf. 222.22-.31). As for the words "The straight road down the centre (see relief map) bisexes the park," the "relief map" is the Diagram itself, the "park" is the lozenge $\pi\alpha P\lambda$, and the "straight line" is the line $\alpha\lambda$, which bisects the lozenge. This bisection is identical to the solution which I have proposed for the problem at *FW*,283.32-284.04, and the line $\alpha\lambda$ is the bisector in both cases. Incidentally, the word "bisexes" implies that in the lozenge, one triangle is male, the other female, a matter which I have considered in Chapter Two; why Joyce relates bisexuality to H.C.E.'s buttocks is puzzling.

The editions of Casey and Todhunter are in all likelihood the contemporary versions of the *Elements* which Joyce used in *Finnegans Wake*, and I have relied upon them in my discussion of the geometry problem. However, the *Elements* is one of the most widely printed books in history, and several other editions are relevant to *Finnegans Wake*. Charles Lutwidge Dodgson, who is otherwise so important for *Finnegans Wake*, edited *Euclid Books I, II* (1882), employing Todhunter's diagrams; the diagram Dodgson gives for the First Proposition is identical, but for the letters *F*, *G*, and *H*, to the diagram in Casey, which I reproduce in Figure 4, above. I can find nothing suggestive or remarkable about this text for the purposes of *Finnegans Wake*.[46] Dodgson edited other versions of Euclid, none of which I have been able to examine.[47] Considering the sexual implications of Joyce's Diagram, W. D. Birdwood's book *Euclid's Outline of Sex* has a provocative title.[48] In another of the coincidences which conspire around Joyce's purposes, a certain Sidney Wallace Finn edited *The Junior Euclid. Books I & II (III & IV)*.[49] A popular school edition of the nineteenth century appeared under the name of John Playfair;[50] in *Finnegans Wake*, Joyce names Playfair (which is also the name of the Magazine commander during the Easter Rebellion) as "Plyfire" (439.35) and as "playfair" (233.12).

Euclid's *Elements* has received attention from various mathematicians of antiquity and the Middle Ages. Heron, Pappus, Porphyry, Proclus, and

Simplicius all prepared commentaries upon it.[51] In De Figuris Geometricis, Boethius reproduces the diagram for the First Proposition of the Elements, Book I, and provides a gloss.[52] Martianus Capella, a possible source of Joyce's knowledge of the trivium and quadrivium, personifies Geometry as a female pedagogue who questions a group of philosophers about the First Proposition.[53]

The 'pons asinorum' and other nicknames for Euclid's Propositions

Some of Euclid's Propositions have acquired picturesque nicknames. Propositions Seven and Eight of Book III are characterized, respectively, as pes anseris ("goose's foot") and cauda pavonis ("peacock's tail"). Proposition Five of Book I was once called elefuga or fuga miserorum ("flight of the miserable"), because, according to Roger Bacon, scholars fled from it;[54] in Troilus and Criseyde (III.933), Pandarus translates the nickname as "flemyng of wrecches."[55] More recently, Proposition Five has become known in England as pons asinorum ("asses' bridge"), probably because of its difficulty, but possibly because its diagram is shaped like a trestlebridge which only a surefooted ass could cross (in France, however, this term is used of Proposition Forty-Seven, conceivably for the same reasons).[56] In the sixteenth century, pons asinorum was still being used in logic to refer to "the conversion of propositions by the aid of a difficult diagram for finding middle terms,"[57] but by 1925, it had sufficient currency as the nickname of Proposition Five for Punch to quip, "when they film Euclid, as is suggested, we shall no doubt see a very thrilling rescue over the burning Pons Asinorum."[58]

Joyce alludes to the geometrical meaning of the pons asinorum when he has Shem "run over the assback bridge" (84.03). If one accepts the explanation that pons asinorum became a nickname for Proposition Five because of its difficulty, perhaps Joyce means to say here that Shem has solved the difficult problem, as befits the abilities of one who later initiates his slow-witted brother into the sexual mysteries of the Diagram. There must also be some connection with the "ass" motif in Finnegans Wake. An ass follows the Four (see 214.33, 405.06, 475.31), and there are indications that Shaun, not Shem, is this ass; Jaun brays "like Brahaam's ass" (441.25), and Yawn supplies answers to the Four that are "straight from the ass his mouth" (480.06-.07). In all likelihood, Shaun as the ass is Christ, and the Four are the Four Evangelists. If, by portraying Christ as an ass, Joyce is repeating the charges of onolatry brought against the Christians in antiquity,[59] the slander would add to the patterns of reversal, diabolic and otherwise, which I have considered in Chapter Two; his word "assback" (84.03) suggests a reversal. However, the ass in Finnegans Wake may also owe something to Bruno, who used it as a symbol of negative theology.[60] The nickname is mentioned by neither Casey nor Todhunter. For my discussion of the nicknames, I am indebted to Sir Thomas L. Heath's The Thirteen Books of Euclid's Elements; there is no evidence that Joyce read about the common phrase pons asinorum here, but it is as likely as any other source.

As Heath tells us, Proposition Forty-Seven of Book I, the so-called Proposition of Pythagoras, is also variously known as the theorem of the bride, the bride's chair, the Franciscan's cowl (Francisci tunica), and dulcarnon.[61] In the Diagram chapter of Finnegans Wake, Shem makes use of the last of these terms in a marginal comment: "twoheaded dulcarnons but more pulfers turnips" (276.L1; Joyce's emphasis); the text opposite discusses the twins, hence the reference to "twoheaded." Shem's comment is all that remains of Joyce's original entry in the *Scribbledehobble* notebook upon which it is based: "dul carnon = 2 horned, 47th prop of Euclid or Alexander's 2 horn heads, putty, natural rejection, to pulfer turnips."[62] Part of this note is based on Skeat's gloss of Criseyde's use of the word *dulcarnon* to express her dilemma to Pandarus (*Troilus and Criseyde*,III.931): "*at dulcarnon*, at a non-plus, in extreme perplexity. *Dulcarnon* . . . represents the Pers. and Arab. *dū'lkarnayn*, lit. two-horned; from Pers. *dū*, two, and *karn*, horn. It was a common medieval epithet of Alexander the Great, who was so called because he claimed descent from Jupiter Ammon, whose image was provided with horns like a ram. . . . *Dulcarnon* was also a name for the 47th prop. of Euclid, Book I . . . the two smaller squares in the diagram stick up like two horns."[63] Why Joyce associates "*turnips*" with the dulcarnon complex I do not know. Perhaps there is a connection with Stephen Dedalus' sardonic request to Donovan to bring him back turnips from his next botanical field trip (*Portrait*,211); a few pages earlier, there is a geometrical reference in Lynch's preference for "the hypothenuse of the Venus of Praxiteles" (*Portrait*,208).[64]

Dee's "Mathematicall Praeface": geometry and the Hermetic tradition

The first English edition of Euclid was *The Elements of Geometrie of the most auncient Philosopher Evclide of Megara* (1570); the translator was H. Billingsley, and the Renaissance magus, John Dee, contributed a famous "Mathematicall Praeface."[65] The use of similar terminology may indicate that Joyce knew Dee and this edition. Although Skeat seems to be Joyce's source of information concerning dulcarnon, the word is also used by Billingsley in connection with Proposition Forty-

Seven of Book I: "it hath bene commonly called of barbarous writers of the latter time Dulcarnon."[66] John Dee himself suggests that after reading his "Mathematicall Praeface," the pupil will either be apter for a second lesson or else "shortly become, well hable of your selues, of the lyons claw, to coniecture his royall symmetrie, and farder propertie."[67] Joyce uses the same phrase as Dee in expressing the idea that the whole can be derived from the part, namely, "ex ungue Leonem" (162.19; Joyce's emphasis); this phrase articulates a magical principle and a major theme in Finnegans Wake, elsewhere stated as "When a part so ptee does duty for the holos we soon grow to use of an allforabit" (18.36-19.02). Dee defines number and magnitude in the following terms: "a broade magnitude, we call a Superficies or a Plaine. . . . A long magnitude, we terme a Line. . . . Euery certayne Line, hath two endes: The endes of a line, are Pointes called. A Point, is a thing Mathematicall, indiuisible, which may haue a certayne determined situation. If a Poynt moue from a determined situation, the way wherein it moued, is also a Line."[68] The three terms defined here are all used in Joyce's "cross Ebblinn's chilled hamlet (thrie routes and restings on their then superficies curiously correspondant with those linea and puncta" (41.17-.19). Dee says that "we may in eche Ternarie, thrise, seuerally pointe, and shew a part, One, One, and One";[69] Joyce identifies A.L.P. as 111. There are two references to the word coss in the "Mathematicall Praeface," once in "the Rule of Coss or Algebra" and once in "Coss or Thing"; in both cases the word is equivalent to the L. res.[70] In Finnegans Wake, "Coss? Cossist?" (293.01) are the opening words of the paragraph which contains the Diagram.[71]

Like A.L.P., Dee had the habit of referring to himself by a capital letter delta, Δ. Because of the connection A.L.P. and Dee share with things mathematical, one is tempted to associate Dee with every occurrence of "D," "Dee," "Δ," "delta," and so on in Finnegans Wake; "Dee" alone is used four times (54.11, 133.36, 226.15, 525.33). The "Mathematicall Praeface" begins with a large letter D, in which are inscribed a capital delta at the top, Dee's heraldic shield ("Gules a lion rampant or, within a bordure indented of the second") in the middle, and the sign he devised known as the Hieroglyphic Monad at the bottom.[72] After Theorem XXIIII of his Monas Hieroglyphica (1564), Dee writes, "Amen, says the fourth letter, Δ: to whom God gave the will and the ability thus to record this divine mystery in a written memorial."[73] There is a design based on Solomon's Seal both at the end of "The Translator to the Reader" in The Elements of Geometrie of . . . Evclide,[74] and at the end of Dee's "Mathematicall Praeface."[75]

Frances Yates declares that the "Mathematicall Praeface" is more important than Bacon's Advancement of Learning as "a manifesto for the advancement of science," because Dee asserted the role of mathematics in science, while Bacon neglected it.[76] However, despite this testimonial of Dee's efforts on behalf of pure science, it is chiefly as a magus that he is remembered. Though his views on magic are more fully expounded elsewhere in his works,[77] there is some evidence of these views in the "Mathematicall Praeface." There, Dee commences with a Platonic analysis of the three classes of being, "Supernaturall, Naturall," and "Mathematicall," and as in Plato, mathematical being is said to mediate between the other two classes of being;[78] later, he quotes the Republic, Book VII on the view that geometry lifts the mind to truth and leads to knowledge of the everlasting.[79] Since creation is by number, the Creator's mind may be known through such number.[80] Dee goes on to define two new sciences. Anthropographie is the science in which all creation is measured by man, the "Lesse world" and the "Microcosmus."[81] Thaumaturgike is "that Art Mathematicall, which giueth certaine order to make straunge workes, of the sense to be perceiued, and of men greatly to be wondred at."[82] By the power of Thaumaturgike, says Dee, Albert Magnus constructed a brazen head which could speak, Archytas a "Doue of wood," and Daedalus "straunge Images."[83]

Towards the end of his dissertation, Dee pauses for a rhetorical aside directed against those who would call him a conjuror,[84] despite the broad hints he has already given that he does not greatly distinguish between mathematics and magic. It is known that Dee was chiefly interested in number for its cabbalistic power in invoking angels and spirits.[85] Dee was an important influence on the members of the Order of the Golden Dawn, especially upon Aleister Crowley[86] and Yeats. In the "Introduction" by Owen Aherne to the first edition of A Vision (1925), Michael Robartes is described as saying that after the riot described by Yeats in "Rosa Alchemica," he wandered through Europe and finally went to Cracow, "partly because of its fame as a centre of printing, but more I think because Dr. Dee and his friend Edward Kelly had in Cracow practised alchemy and scrying." Since it is in Cracow that Robartes discovers Giraldus' Speculum Angelorum et Hominorum (itself said to have been printed in Cracow, 1594), and since Giraldus' book is so important in A Vision, it must be that Dee himself is vital for an understanding of Yeats's diagrams,[87] which, in turn, influenced Joyce.

The significance of the 'Elements'; the influence of Bruno and Vico

This concludes the discussion of the editions of the Elements which Joyce may have known and used. At this point I shall inquire into the reasons for Joyce's attraction to Euclid and, in particular, to the First Proposition. It is immediately apparent that if one sets out, as Joyce did in *Finnegans Wake*, to synthesize a sizeable part of world culture, then Euclid must of necessity be included. According to Heath, the *Elements* is and will remain "the greatest mathematical text-book of all time. Scarcely any other book except the Bible can have circulated more widely the world over, or been more edited and studied."[88] One has the sense that the *Elements* is a monument marking the beginnings of Western culture, despite the fact that this opinion is incautious in the strictly historical acceptance (the book is the culmination of a millennium's speculation; previous syntheses include those of Hippocratēs of Chios, Leōn, and Theudios of Magnēsia[89]). Joyce seems to have been attracted to uncomplicated and well-defined beginnings; he is reported to have said, "in my case the thought is always simple."[90] And Stephen Dedalus defends Aristotle against the Platonizing A.E. with the quip "The schoolmen were schoolboys first" (*U*,185); later, he affirms "his significance as a conscious rational animal proceeding syllogistically from the known to the unknown" (*U*,697). *FW*,II.2 depicts the initiation of the children into the mystery of life's inception, and elementary geometry is commensurate with such an initiation, as I show in Chapter Five.

From the time of Archimedes, Euclid was known as ὁ στοιχειώτής ("the writer of the *Elements*,"[91] or "the elementator"[92]). Joyce repeats this epithet in "me elementator joyclid" (302.12), at the same time equating himself with Euclid, for "joyclid" blends "Euclid" and "Joyce." Proclus compares the elementary theorems of geometry, the regnant principles out of which the whole science proceeds, to the letters of the alphabet, which are the first principles of language; he is abetted in his comparison by the fact that the Greek word στοιχεῖα means both the elements of geometry and the letters of the alphabet.[94] As Euclid in geometry, so Joyce in letters. According to Cedric H. Whitman, the visual counterparts of *stoicheia* which characterize the so-called Geometric period of classical Greek art provide an analogy with the Homeric epics; "Homeric formulae are, like the motifs of Geometric vases, basically stiff traditional elements, irreducible building blocks of oral epic." Whitman analyses the structural properties of the epics in terms of Geometric art, whose "discrete but sequential motifs find their unity in the external shape in which they stand, and very little in their subordination or interplay with each other."[95] The connections which Joyce finds between geometry and literature, that is to say, are at least as old as Homer.

It is inconceivable that Joyce would have included Euclid's First Proposition in *Finnegans Wake* without a symbolic purpose. He would have found justification for geometric symbolism in two of his favourite philosophers, Giordano Bruno[96] and Giambattista Vico. According to J. Lewis McIntyre, whose book *Giordano Bruno* Joyce reviewed in 1903, Bruno wanted to demonstrate "that the greater part of Euclid may be intuitively presented in three complicated figures, named respectively the *Atrium Appollonis*, *Atrium Palladis*, and *Atrium Veneris*."[97] McIntyre notes that the same three figures, with slight differences, are to be found elsewhere in Bruno, under the names *Figurae Mentis*, *Intellectus*, and *Amoris*.[98] Like John Dee, then, who thought that his "Mathematicall Praeface" could serve as the lion's claw for all of geometry, Bruno believed that through study of his three figures, all of geometry could be known. This idea can be viewed as a particular application of his more general thesis, derived from Agrippa, that one continuous spirit informs the cosmos and that consequently the least object in nature may cause the greatest effect.[99] Furthermore, for Bruno geometrical figures are not only the compressed emblems of all geometry, but also, following the lead of Raymond Lull, metaphors for human thought itself.[100]

In "The Bruno Philosophy" (1903), his review of McIntyre's book, Joyce is willing to set aside certain parts of Bruno's writings, namely, his "treatises on memory, commentaries on the art of Raymond Lully, his excursions into that treacherous region from which even ironical Aristotle did not come undiscredited, the science of morality" (CW,133). Despite the fact that he was wary of this aspect of Bruno, Joyce's statement proves that he was alert to the magical side of Bruno's philosophy, unlike the nineteenth-century liberals who, oblivious of his activities as a magician, saw in Bruno the champion of the scientific spirit against the dark restraining forces of mediaevalism; in her recent book, Giordano Bruno and the Hermetic Tradition, Frances Yates has shown how untenable is the picture of Bruno as the free philosophical spirit martyred for his heretical scientific views.[101] According to Yates, "by engraving in memory the celestial images, archetypal images in the heavens which are shadows near to the ideas in the divine *mens* on which all things below depend," Bruno hoped "to achieve this 'Egyptian' experience, to become in true gnostic fashion the *Aion*, having the divine powers within him."[102] By imprinting magical geometric images on the memory, Bruno believed that he could prepare the imagination to receive demonic powers.[103]

When Stephen Dedalus notes in his diary that he had defended Bruno's execution to Ghezzi (Portrait,249), he fails to explain the grounds of his defence. A clue to the nature of this defence may be given when, earlier in the book, a "phrase of Cornelius Agrippa" passes through Stephen's mind as he stands on the library steps divining the flight of birds (Portrait,224); the epiphany of his meditation is a vision of Thoth, god of the Hermetists (Portrait,225). When Stephen defends Bruno, then, he may be thinking of him as a disciple of Agrippa[104] and of Egyptian Hermetism (see Bruno's admiration for matters Egyptian in Spaccio della bestia trionfante [1584] and De gli eroici furori [1585][105]). In view of the contemporary rediscovery of Bruno the magus, Joyce's relation to the Nolan requires a reinterpretation.

This is not the place for such a reinterpretation, but I would like to draw attention to the possibility that the many magical geometric figures found throughout Bruno's works influenced Joyce's decision to include a Diagram in Finnegans Wake. It is, I believe, possible to be quite specific in matching a few of these figures to Joyce's. In De Monade Nvmero et Figvra (1589), there is a figure composed simply of two intersecting circles,[106] but I cannot agree with the critic who claims that it is an analogue of Joyce's Diagram,[107] for in Bruno's figure there are no triangles, and the two circles, arranged vertically, not horizontally, do not intersect at the centres.

Of palpably greater interest is the Atrium Appollonis, which McIntyre mentions as one of the three figures that comprehend all of Euclid, and which, with slight differences, is also known as Figura Mentis. In this figure, leaving aside the secondary connecting lines, the basic design is four circles intersecting one another at their centres, so as to produce five forms of the shape known as the vesica piscis; inside each vesica piscis is a perfect diamond. The four circles are all enclosed in a larger circle.[108] That part of Joyce's Diagram formed by the intersection of the two circles is also a vesica piscis, and it also contains a perfect diamond or lozenge[109] (see Chapters Four and Five for a discussion of these two figures); to my mind, the parallels between Bruno's Atrium Appollonis and Joyce's Diagram are significant. Bruno also attaches specific symbolical meanings to the three Figurae Mentis, Intellectus, and Amoris, namely, "universal mind," "intellect," and "love," respectively; the last is said to unite contraries.[110] According to Yates, "these three figures are said to be the most 'fecund', not only for geometry but for all sciences and for contemplating and operating. These three figures thus represent the Hermetic trinity, as defined by Bruno in the 'Thirty Statues'. The third one, the one which is the amoris figura . . . actually has the word MAGIC written in it in letters on the diagram." Further, she remarks, the three figures are associated with the sun, moon, and a five-pointed star, respectively.[111] One does not want to overstep the bounds of probability in applying Bruno's actual symbolic system to Joyce; however, if the analogy between the Atrium Appollonis (and the Figura Mentis) and Joyce's Diagram is accepted, then the Diagram partakes of Bruno's symbology, universal mind and the sun. The main point I wish to establish is that geometrical figures were used for symbolic and magical purposes by a philosopher close to Joyce's heart.

Before leaving Bruno, it can be noted here that Joyce is indebted to him for the concept of the coincidence of contraries, in the formulation of which notion Bruno was inspired in turn by Nicholas of Cusa.[112] This concept is expounded in Spaccio della bestia trionfante and De la causa, principio e uno (1584). In the latter, the coincidence of opposites is demonstrated by geometry; although the straight line and the curve are opposites, they are equal in their minima, because, explains McIntyre, "as Cusanus saw, there is no difference between the smallest possible arc and the smallest possible chord." The same can be said for an infinitely large circle and a straight line.[113] In that both mention arc and chord, the quotation from McIntyre bears some resemblance to the geometry problem in Finnegans Wake,283.32-284.04, discussed above: "Show that the median, hce che ech, interecting at royde angles the parilegs of a given obtuse one biscuts both the arcs that are in curveachord behind." In light of the resemblance between this passage and McIntyre's explanation of the coincidence of opposites, the notion that Joyce's Diagram unites the contraries Shem and Shaun is all the more likely.

Vico's ideas on mathematics and truth are more accessible than Bruno's, but they are as relevant. One of his central insights is expressed in the formula verum ipsum factum: man can only know what he has made. Mathematics, language, and culture can be known, but not physics. Vico rejected Descartes' idea that certainty about physics is as possible as it is about mathematics; he stated that mathematics is certain because it is arbitrary, while physics is less certain because God, not man, created the physical world.[114]

Vico championed the classical geometry of Euclid and Archimedes, which is intuitive, visual, and figural, because it stimulates the imagination and memory of the student. And such stimulation, according to Vico, is likely to lead to the production of mendacia poetica ("poetical figments"). The poet generalizes from what he invents; the geometer similarly invents figures and constructs truth: "the important thing is to hold fast to the view that the fictitious, that is, the artificial and artful character of the primary geometrical concepts, bears a kinship to the nature of poetical figments."[115] When he was asked whether he "believed" in Vico's The New Science, Joyce did not mention geometry, but he did aver to stimulation of the imagination: "I don't believe in any science, but my imagination grows when I read Vico as it doesn't when I read Freud or Jung."[116] Joyce's sanctions for including geometry in his own universal history should now be fairly clear. From both Bruno and Vico he learned that geometric figures have a deep relationship to the human imagination and the power to stimulate it into poetic activity.

Proclus, Euclid, and Joyce

Joyce draws an important analogy between Plato's Timaeus and his own Euclidean Diagram; he may have found his rationale for this analogy in the Platonic allegory which Proclus Diadochus wrote on Euclid's Elements. The name of Proclus does not appear in Finnegans Wake, but his A Commentary on the First Book of Euclid's Elements[117] is the sole treatise on the objects of mathematical investigation and method that has survived from the classical ages;[118] if Joyce investigated geometry in any depth, Proclus is one of the authors he is likely to have read. According to Proclus, when King Ptolemy asked Euclid how he could master geometry without learning the Elements, Euclid replied that there is "no royal road to geometry."[119] Joyce refers to Euclid's famous remark as "Now, sknow royol road to Puddlin, take your mut for a first beginning" (287.04-.06); the context is the construction of the Diagram.[120] Like Joyce, Proclus was a syncretist, and he performed religious duties on both Egyptian and Greek holy days and studied deeply all mythology and religion: "he declared that it becomes the philosopher not to observe the rites of one city or of a few cities only, but to be the common hierophant of the whole world."[121] Rather than inventing his own system, Proclus coordinated the work of his predecessors.[122] In addition, the philosophical works of Proclus had a profound influence on many of the writers important to Joyce, including Erigena, Aquinas, Dante, and Nicholas of Cusa.[123]

In A Commentary on the First Book of Euclid's Elements, Proclus declares that "Euclid belonged to the persuasion of Plato and was at home in this philosophy; and this is why he thought the goal of the Elements as a whole to be the construction of the so-called Platonic figures."[124] The Elements does, indeed, conclude with the five regular solids which Plato matches with the five elements in the Timaeus. The question as to whether Euclid was a Platonist or an Aristotelian I consider later; here, I continue with the portions of Proclus' Platonic interpretation of Euclid relevant to Joyce's Diagram.

According to Proclus, the circle is "the first and simplest and most perfect of the figures," and when one analyses the cosmos, the circle is seen to be associated with the divine: "if you divide the universe into the heavens and the world of generation, you will assign the circular form to the heavens and the straight line to the world of generation." When the circle is found in nature, it is as an agent of the heavens. The world of generation is changeable and chaotic, but the regular rotation of the heavens bestows order upon it by bringing it back upon itself. When one considers immaterial being, the soul is like a straight line, Nous like a circle; soul is related to Nous as generation is to the heavens, and this is why the soul returns to Nous in a circle (cf. Timaeus and Laws). Again, if one is speaking of body and soul, body is like a straight line, soul like a circle, "for the former is composite and possesses varied powers, like the rectilinear figures; the other is simple and intelligent, moving and acting of its own accord, turned inwards, and occupied with itself." Proclus cites the Timaeus (34,53) as his authority on circular motion.[125] The circle and circular motion are said to be the beginning of all motion.[126]

The First Cause, the highest intelligible, moves circularly and produces the rectilinear figures, the first of which is the triangle.[127] The Pythagoreans had thought of the triangle as the fount of generation; the Timaeus (53) conceives triangles to be "the ideas of natural science, those used in the construction of the cosmic elements." There are three types of triangle, which "bring into unity things that are in every way divided and changeable, are full of the indefiniteness of matter, and set up in advance the dissoluble bonds of material bodies, just as triangles themselves are contained by straight lines and have angles that bring together the plurality of these lines and provide them with an imported fellowship and contact with one another." The equilateral triangle is to be compared with divine souls, "for equality is the measure of unequal things, as the divine is the measure of all secondary things." The isosceles triangle pertains to the higher powers in nature, while the scalene governs life divided and lame of limb.[128]

When he comes to comment directly on the First Proposition of the Elements, Book I, Proclus observes that the equilateral triangle, the most beautiful of triangles, is closest to the circle. The manner in which a triangle is encompassed by the two circles in the First Proposition, he says,

> seems to indicate in a likeness how the things that proceed from

> first principles receive perfection, identity, and equality from these principles. In this way too the things that move in a straight line are carried about in a circle through the entire world-process, and souls, despite their movements from place to place, are likenesses of the unmovable activity of Nous because of their periodic return to their starting-points. It is said also that the life-giving source of souls is bounded by a twofold Nous. If, then, the circle is the likeness of intelligible being, and the triangle the likeness of the first soul because of the similarity and equality of its angles and its sides, it would seem reasonable to demonstrate it by means of circles as an equilateral middle area cut off in them. And if, furthermore, every soul proceeds from Nous and returns to Nous and participates in Nous in a twofold fashion, for this reason also it would be proper that the triangle, which is a symbol of the three natures in the constitution of the soul, should take its origin from being comprehended by two circles. [129]

Later, I demonstrate more fully how Joyce equates the two circles (Shem and Shaun) in his Diagram with the "twofold Nous" of Plato that Proclus speaks of here, namely, the two circles of the Same and the Other. It is vital to recognize that only in Proclus could Joyce have found the link between Euclid's illustration for the First Proposition and Plato's Same and Other. According to Proclus, the two circles generate the first soul as the equilateral triangle; Joyce relates his Diagram to A.L.P. the Great Mother and the source of all life. Proclus sees the triangle as a symbol of the three natures in the soul; H.C.E. is the upper triangle produced in the Diagram, and he is also composed of three natures. Proclus distinguishes the circle as superior to the straight line in all spheres of being; in Finnegans Wake, H.C.E. is defined as a straight line, and A.L.P. as a circle, as, for example, in "Ainsoph, this upright one, with that noughty besighed him zeroine" (261.23-.24). Where Proclus and Joyce differ is that Proclus posits a male creator, while Joyce's creatrix, A.L.P., is female.

Like Plato before him, and Bruno, Dee, Vico, and Yeats after, Proclus thinks that mathematics stimulates the imagination; being a good

Platonist, he conceives this process to be the recollection of the Ideas within the individual soul. Mathematics, he says, "arouses our innate knowledge, awakens our intellect, purges our understandings, brings to light the concepts that belong essentially to us, takes away the forgetfulness and ignorance that we have from birth, sets us free from the bonds of unreason; and all this by the favor of the god who is truly the patron of this science, who brings our intellectual endowments to light, fills everything with divine reason, moves our souls towards Nous, awakens us as it were from our heavy slumber, through our searching turns us back upon ourselves, through our birthpangs perfects us, and through the discovery of pure Nous leads us to the blessed life."[130] The soul itself, he observes, citing the Timaeus (35-36), is thought by Plato to be composed of mathematical forms: "all mathematicals are thus present in the soul from the first."[131]

In modern times, a controversy has revolved around Proclus' statement that Euclid's Elements is Platonic, even though Proclus had the distinct advantage of being the direct successor of the Academy, a millennium and a half closer to the object of his allegory than are his modern critics. Among those who oppose Proclus' view is Sir Thomas Heath. While he is willing to concede that Euclid was under the tuition of Plato's pupils in Athens and that he may have been a Platonist, Heath accuses Proclus of contradicting himself; the Elements concludes with the five solid figures known as the Platonic solids, but these are related only to the stereometry (solid geometry), and not to the planimetry (plane geometry) and arithmetic.[132] The objections of Sarton[133] and Morrow[134] to Proclus' position are along similar lines.

While they also present arguments against Proclus, Maziarz and

Greenwood strike a more balanced view. In the first place, they say, if Euclid were a Platonist, he would have taken his first principles even further back, in order to show how definitions such as point and line derive from the One and the Dyad.[135] They find no evidence in the Elements that geometrical figures are imitations of the Ideas.[136] A Platonist would have begun with number, the primary triangles, or the irrationals. Plato and other ancient Greeks experienced religious and philosophical anguish over the discovery through geometry of the irrational numbers. Plato wanted to preclude the uncertainty of the irrational by basing geometry on number; Euclid, however, geometrizes the continuum. As for the conclusion of the Elements in the five solids, Maziarz and Greenwood would account for it as an attempt at completeness and rationalization along Aristotelian lines.[137] However, they do say that although Euclid's means of demonstration is that of Aristotle, most scholars think that "his ultimate vision was Platonic in intention"; they conclude that, although Aristotle was more important, both philosophers influenced Euclid:[138] "the rule of logic strengthened by the Platonic dialectic of numbers became supreme with Euclid, who submitted geometry to its canons."[139]

Maziarz and Greenwood cite Rey and Brunschvigg as examples of contemporary scholars who agree with Proclus; in the view of the latter, Plato's concepts of science and mathematics are exemplified in the very form of the Elements.[140] B. L. van der Waerden suggests that the work of Euclid contains all the mathematics of Plato and his followers; in the Republic and elsewhere, Plato defined arithmetic, geometry, astronomy, and harmony as the prerequisites for the study of philosophy, and these four are precisely the subject matter of Euclid's works: arithmetic and geometry in the Elements, astronomy in the Phaenomena, and harmony in the Sectio Canonis.[141] In a portion of The Decline of the West concerned with classical man's religious preference for the concrete, the physical, and the localized, as opposed to the abstract, Spengler speculates that the result of this preference was "a college of Euclidean deities"; he writes that "there is no doubt that something of cult was comprised in the Euclidean mathematic - consider, for instance, the secret doctrines of the Pythagoreans and the Theorems of regular polyhedrons with their esoteric significance in the circle of Plato."[142]

Plato's 'Timaeus' in 'Finnegans Wake'

The question of Euclid's philosophical orientation - Aristotelian or Platonic - is doubtless an insoluble problem. The point that I wish to make clear is that the Platonic alternative does distinctly exist. As I now demonstrate, Joyce associates Plato with his geometrical Diagram. The only direct link between Euclid and Plato is Proclus' speculations on the First Proposition as a Platonic allegory.

Before Finnegans Wake, Aristotle and Aquinas are the reigning philosophers in Joyce's works. The young Joyce is said to have studied Aristotle in preference to Plato,[143] and Stephen Dedalus echoes this preference with his taunting question, "Which of the two [Aristotle or Plato] . . . would have banished me from his commonwealth?" (U,186). In Finnegans Wake, however, Aristotle merits only a few citations, as Atherton shows,[144] while Plato and his disciple Vico assume an importance that is to be expected in a book of the night and ideal history.[145] Joyce himself has been termed "a hyperborean incarnation of Plato."[146]

The most prominent Dialogue in Finnegans Wake is the Timaeus, which, because of the associations he makes between Plato and Yeats, Joyce probably knew through A Vision.[147] According to the Timaeus (36), the Creator commenced his work by forming the Same, the Other, and the Essence after a preconceived pattern; the circles of the fixed stars and of the variable planets were in turn formed out of these. After compounding the Same, the Other, and the Essence into one,

> this entire compound he divided lengthways into two parts, which he joined to one another at the centre like the letter X, and bent them into a circular form, connecting them with themselves and each other at the point opposite to their original meeting-point; and, comprehending them in a uniform revolution upon the same axis, he made the one the outer and the other the inner circle. Now the motion of the outer circle he called the motion of the same, and the motion of the inner circle the motion of the other or diverse. The motion of the same he carried round by the side to the right, and the motion of the diverse diagonally to the left.[148]

In Finnegans Wake, allusions to Plato are especially numerous in the Diagram chapter. As Hart says, "the World-Soul is depicted geometrically in the two circles of the figure on page 293."[149] Joyce identifies the Same and the Other with Shaun and Shem, respectively, the polarities which converge and separate throughout the book. The most unmistakable proof of this identification is in "while that Other by the halp of his creactive mind offered to deleberate the mass from the booty of fight our Same with the holp of the bounty of food sought to delubberate the mess from his corructive mund" (300.20-.24); a few lines later, Shem, like Plato's Other, moves "with his sinister cyclopes" (300.26). As I have shown in Chapter Two, FW,300.20-.24 is also a direct parody of Yeats's "Rules for Discovering True and False Masks"; here is additional support for Hart's observation that Joyce came to the Timaeus through Yeats.

Hart also points out that the quincunx on the Tunc page of The

Book of Kells is associated in Book IV of *Finnegans Wake* with "the quincunxes in Plato's World-Soul. The first word of the paragraph in which the 'inferior' meeting of the Same and the Other takes place is in fact 'Tunc' (611.04)."[150] The word *quincunx* is not found in the *Timaeus*; presumably, Hart takes the word from Sir Thomas Browne, for he refers elsewhere to "Browne's luxurious *Garden of Cyrus*, full of rhombs and quincunxes."[151] *The Garden of Cyrus or, The Quincunciall, Lozenge, or Network Plantations of the Ancients, Artificially, Naturally, Mystically Considered* (1658), to give its full title, is relevant to Joyce's interest in the quincunx. Browne's prolonged discussion of plants in this work makes it entirely likely that Joyce is referring to it in *Finnegans Wake* as "Browne's *Thesaurus* *Plantarum*" (503.34-.35; Joyce's emphasis). Sir Thomas bases his theory of vision on the quincunx; he suggests that the pyramidal rays from a perceived object decussate at the eye, forming a second pyramid on the retina; the visual images proceed into the intellect, memory, and understanding via a further series of crosses (cf. the discussion of vision in the Berkeley-Patrick episode). The spirits of the worlds are also said to descend and ascend by the letter *X*. Browne's most important remark is the connection he makes between the quincunx and the figure of the Same and the Other in the *Timaeus*:

> of this Figure *Plato* made choice to illustrate the motion of the soul, both of the world and man; while he delivereth that God divided the whole conjunction length-wise, according to the figure of a Greek χ, and then turning it about reflected it into a circle; By the circle implying the uniform motion of the first Orb, and by the right lines, the planetical and various motions within it. And this also with application unto the soul of man, which hath a double aspect, one right, whereby it beholdeth the body, and objects without; another circular and reciprocal, whereby it beholdeth it self. The circle declaring the motion of the indivisible soul, simple, according to the divinity of its nature, and returning unto it self; the right lines respecting the motion pertaining unto sense, and vegetation, and the central decussation, the wondrous connexion of

> the severall faculties conjointly in one substance. And so conjoyned the unity and duality of the soul, and made out the three substances so much considered by him; that is, the indivisible or divine, the divisible or corporeal, and that third, which was the Systasis or harmony of those two, in the mystical decussation.[152]

Although Plato does mention an X in describing the construction of the Same and the Other, only Browne uses the word quincunx in the same connection; since Joyce associates the quincunx of the Tunc page with the Same and the Other (611.04), his likely source is Browne. It has been suggested, apart from Browne, that Finnegans Wake itself is a quincunx.[153]

The dialogue between Patrick (Shaun) and Berkeley (Shem) in Book IV (610.34-612.36) enlarges on the Same-Other theme in Finnegans Wake. The Other is Plato's name for the inner motion of the planets in seven unequal circles; the Same is the outer, dominant motion of the fixed stars, single and undivided (Timaeus,36).[154] In an analogous way, Shem-Berkeley (the Other) argues that light is sevenfold and that as such it is the clue to the "inside true inwardness of reality" (611.21); the real colour of an object, he claims, is the colour of the light it retains rather than the colour it reflects to the eye. Shaun-Patrick (the Same) wins the debate by urging that light is one, white, and undivided; he counters Berkeley's theory of colour with the common sense, objective view of vision that the colour perceived is actually the real colour.[155] In the Introduction to his translation of the Timaeus, Benjamin Jowett remarks that the Same and the Other are united by intelligence, the "'One in many', brighter than any Promethean fire . . . which co-existing with them and so forming a new existence, is or becomes the intelligible world."[156] This unification of the Same and the Other supports Hart's idea that the opposition between white light and the rainbow in the Patrick-Berkeley episode is reconciled in passages such as "farst wriggle from the ubivence, whereom is man, that old offender, nother man, while he is asame" (356.12-.14; Hart's emphasis).[157] In Chapter Two, I suggested that the Diagram is the rainbow that reconciles opposites; here I might add that Hart's example, a variation of "the first riddle of the universe . . . when is a man not a man?" (170.04-.05), implies as well that the Same (Shaun) and the Other (Shem) are the two halves of the microcosmic human soul, as well as the two celestial movements in the macrocosm. This interpretation is in agreement with Plato's account of the human soul as composed of the Same, the Other, and the Essence (*Timaeus*,37);[158] perhaps it is not too far-fetched to compare H.C.E. to Plato's Essence, since his sons are the Same and the Other. When Joyce asks, "shall the vectorious readyeyes of evertwo circumflicksrent searclhers never film in the elipsities of their gyribouts those fickers which are returnally reprodictive of themselves" (298.14-.18), he is investigating the power of vision, as it resides in two eyes, to penetrate into the realm of the Ideas. The two eyes are Berkeley and Patrick, Shem and Shaun, the Other and the Same, and the two circles in the Diagram; the suggestion of reincarnation strengthens the Platonic context. There also seems to be an echo of the following passage from *A Vision* (1925): "I consider that the form should be called elliptoid, and that rotation as we know it is not the movement that corresponds most closely to reality."[159]

Earlier, I showed how Proclus interprets Euclid's First Proposition as a symbol of the twofold circles of the *Nous* creating the material world through a triangle. Plato does describe the *Nous* as acting through the circles of the Same and the Other to impose form on chaos. Later in the *Timaeus* (53-56), he describes in detail the processes by which the elements (he is thinking of the Platonic solids) are generated from triangles. From the isosceles triangle develops the cube (earth), and from the scalene the other three elements; however, the most beautiful triangle is "that of which the double forms a third triangle which is equilateral,"[160] and it is this triangle which is formed in Euclid's First Proposition and Joyce's Diagram. The Diagram and the triangle are the emblems and the instruments of A.L.P., and she is the creatrix of the cosmos of Finnegans Wake. She is also, however, Plato's Necessity, as I show in Chapter Five; in Plato, the bestower of form and number is masculine, and a force apart from Necessity.

Plato's 'Republic' and geometry

Of Plato's Dialogues, the Republic is the other major influence on Finnegans Wake. Stephen Dedalus' remark, quoted above, on the banishment of the poet from Plato's ideal state (U,186) is in reaction to Book X of the Republic (607), where Socrates defends "the reasonableness of our former judgement in sending away out of our State an art having the tendencies which we have described."[161] Two of these tendencies are that "all poetic imitations are ruinous to the understandings of the hearers" and that "poetry feeds and waters the passions instead of drying them up" (Repub.,595,606).[162]

There are traces of Plato's Republic in the Burrus and Caseous episode, even though the narrator of Question 11 is also thinking of Nicholas of Cusa's De Docta Ignorantia[163] when he says, "I am not hereby giving my final endorsement to the learned ignorants of the Cusanus philosophism in which old Nicholas pegs it down that the smarter the spin of the top the sounder the span of the buttom (what the worthy old auberginiste ought to have meant was: the more stolidly immobile in space appears to me the bottom which is presented to use in time by the top primomobilisk" (163.15-.22; Joyce's emphasis). The "top" to which Joyce refers is one of Cusa's "serious games" (serio ludere); the object of these games is to find an item possessing contradictory properties. Since paradox can only be resolved in God, the paradoxical item leads one to consider how God is both immanent and transcendent, and to find Him, for instance, "in the spinning of a top which, when it comes to a stand, combines a state of rest with the greatest speed of rotation."[164] However, the passage FW,163.15-.22 also bears a similarity to the example Socrates, in Book IV of the Republic (436), employs in discussing whether an object can be in motion and at rest simultaneously: "not only parts of tops, but whole tops, when they spin round with their pegs fixed on the spot, are at rest and in motion at the same time"[165] (cf. Joyce's "pegs," 163.17). Socrates is here attempting to prove that the soul is tripartite (rational, irascible, and concupiscent), and since Joyce echoes the passage, the tripartite soul might be taken as a description of Antonius, Burrus, and Caseous (H.C.E., Shaun, and Shem). Another allusion to the Republic in Finnegans Wake is "Gygas" (36.13), which names Gyges, a shepherd who becomes king of Lydia after he finds the ring of invisibility; Socrates uses the legend as a proof that men practise justice only out of necessity (Repub.,359-360).[166]

Turning now to those portions of the Republic more relevant to the theme of Joyce's geometrical imagery, it should be noticed that the comment half a page before the Diagram, "Plutonic loveliaks twinnt Platonic yearlings -- you must, how, in undivided reawlity draw the line somewhawre" (292.30-.32), refers to the "divided line" discussed in Book VI of the Republic (509-511).[167] The line divided into two unequal parts is a metaphor for the two spheres of the intellectual and visible worlds; when these two segments are themselves divided, again in the same proportions, one has a complete picture of quadripartite reality:[168] images and shadows; the world of which these images and shadows are a resemblance; hypotheses abstracted from the first two and used as images; and ideas.[169] Corresponding to each of the four parts of reality is a mental power: perception of shadows, faith (or conviction), understanding, and reason.[170] In practising geometry and arithmetic, the mind ascends beyond visible forms to the third mental power of hypothesis, but it is unable to reach the highest power through these sciences. It is only reason, through the power of dialectic, which is able to employ hypotheses not as first principles but as "steps and points of departure into a world which is above hypotheses, in order that she may soar beyond them to the first principle of the whole."[171]

The analysis of the intellectual methods of arriving at the perception of being is enlarged in Book VII, in which the parable of the Cave is also expounded. According to Plato, the visible reality we perceive is mere shadows (Repub.,514).[172] Joyce may be alluding to these shadows in FW,298.14-.18, where, as we have seen, he mentions the Ideas, reincarnation, and the Same and the Other. In Plato's allegory, the Cave is the visible world, and the shadows which the prisoners see on the wall are cast there by a fire, representing the physical sun, in front of which statues pass; a prisoner's escape and upward journey stand for the soul's ascent to the world of the Ideas, and the sun which he sees for the first time when he emerges onto the earth's surface represents the intellectual sun, the "source of reason and truth" (Repub.,517).[173]

Finnegans Wake is itself the Cave of this world, and the sun which rises all through Book IV can be thought of as the dissolution of the shadows and the dawning of a higher knowledge.

Plato next examines the particular sorts of knowledge which will lead the soul from darkness to light, from becoming to being (Repub., 521).[174] Gymnastic and music are discarded as unsuitable (Repub.,522),[175] while arithmetic, geometry, solid geometry, astronomy, and harmony are declared to be agents leading directly to a knowledge of being. The proper function of arithmetic is "to draw the soul towards being" (Repub., 523).[176] As for geometry, the knowledge it brings is "knowledge of the eternal, and not of aught perishing and transient . . . geometry will draw the soul towards truth, and create the spirit of philosophy, and raise up that which is now unhappily allowed to fall down" (Repub., 525).[177] In view of Joyce's allusions to the Republic and of the Platonic allegory of Euclid's First Proposition adduced by Proclus, I believe that part of the meaning of the geometrical symbolism in Finnegans Wake is that it leads to a knowledge of being, as in the Republic.

The final step to truth can only be taken by means of dialectic, after mastery of the preceding disciplines, for only dialectic is purely intellectual (Repub.,532,533).[178] While the mathematical sciences partially apprehend being, "they only dream about being, but never can they behold the waking reality so long as they leave the hypotheses which they use unexamined" (Repub.,533).[179] As long as A.L.P.'s geometrical spell retains its potency, the dream that is Finnegans Wake continues, preparing the sleeping H.C.E. for his eventual awakening into the world of waking reality. In Plato and Platonism (1893), Walter Pater defines dialectic as "that dynamic, or essential, dialogue of the mind with itself, which lends, or imputes, its active principle to the written or spoken dialogue, which, in return, lends its name to the method it figures - 'dialectic.'"[180] The endless dialogues and confrontations between Shem and Shaun and their avatars in Finnegans Wake, along with their periodic reconciliations, can be regarded as this process of dialectic, through which H.C.E. is finally realized; as in Plato, it is geometry which is the basis of the dialectical realization. Geometry is the royal road to the world of the Ideas or, as it is more commonly known today, the collective memory; as I show in Chapter Five, A.L.P. is the mistress of geometry, the source of the phenomenal illusion and of release from that illusion, and the womb of the collective memory.

Plato, the Greeks, and the pun

The pun in Finnegans Wake is the dialectical process writ small; it is the rhetorical counterpart of the theme of the reconciliation of opposites. H. D. Rankin has suggested that the numerous puns on Plato's name and works in Finnegans Wake convey, first, that certain Platonic subjects are significant, and, second, that Joyce's understanding of Plato is "thematic" rather than "detailed."[181] I find Rankin's observations unsatisfactory; in view of my previous demonstration of Joyce's indebtedness to Plato, I cannot endorse his opinion that Joyce's knowledge of Plato was not detailed. When Joyce makes puns on Plato, he may be doing so in the context of the ancient Greek attitude to the pun.

According to Jowett, analogy had an overpowering influence on the citizen of Plato's time: "he was helpless against the influence of any word which had an equivocal or double sense." There were many words with double or multiple senses, such as: στοιχεῖον ("shadow of a gnomon in a sun-dial"; "one of a series, an elementary sound of the voice, a letter"; "the elements"; "the elements of knowledge"), συλλᾰβή ("that which holds together"; "that which is held together, of several letters taken together, so as to form one sound, a syllable"), ἀρμονία ("a joining, joint"; "a frame"; "temperament"; "covenant"; "harmony"), and κόσμος ("order"; "decency"; "form, fashion"; "order, government"; "ornament"; "honour, credit"; "regulation, chief Magistrate in Crete"; "the world or universe"; "mankind"). These punning correspondences, says Jowett, occasionally directed attention to a corresponding similarity between things not otherwise connected.[182] Writing in the days before Joyce and Empson, Jowett could see little in ambiguity but an obstruction to the clarity of philosophical thought.

The pun and the poetic metaphor, of course, have much in common. A recent commentator on Plato's use of mathematics takes a more positive view than does Jowett of the ambiguities in the Greek language. R. S. Brumbaugh writes of the power of mathematical terminology, especially in Plato's writings, to connote simultaneously a construction and its interpretation;[183] insofar as it is polyvalent, mathematical symbolism is similar to poetic metaphor.[184] Of the several examples of Plato's mathematical puns which Brumbaugh gives, one will suffice to suggest their nature. In Book VII of the Republic (534), it is said that the children now being educated are incapable of ruling the state because they are "as irrational as the lines so called in geometry."[185] These mathematical jokes can partly be accounted for as fun at the expense of the overzealous professional[186] (the Parmenides and the Republic have been explained as witticisms[187]), but their true justification resides in the concept that physical, mathematical, and moral being exhibit the same attributes, that is, in the doctrine of correspondences which underlies the "normal" mobilization of mathematical imagery in the Pythagorean and Platonic circles. The very etymological pedigree of such imagery, drawn as it is from biology, ethics, and technology, documents the correlations which a human mind perceived in its world.[188] In this sense, the pun is the method of discovering the interconnexion of reality and the secret sympathies which resonate in the hidden caverns of the human mind.

Joyce squares the circle: the coincidence of opposites

Although the problem of squaring the circle is not directly related to Plato, it was of enormous consequences to the Greeks, and it will be convenient to conclude this chapter by appending a consideration of its implications. Squaring the circle, like the pun, is an ideal metaphor for the reconciliation of opposites. Joyce took the metaphor very seriously and applied it to *Finnegans Wake* itself: "I am making an engine with only one wheel. No spokes of course. The wheel is a perfect square. . . . No, it's a wheel, I tell the world. *And* it's all *square*."[189] Leopold Bloom had been unsuccessful in his attempts at squaring the circle (*U*,515, 699, 718),[190] but Joyce thought that *Finnegans Wake* was the triumphant solution. When Shem is presented as "the first till last alshemist" (185.34-.35), one of his acts is naturally "circling the square" (186.12), because the problem is one of the central mysteries of alchemy, where it is an image of the reconciliation of opposites (*vide infra*). When Issy speaks of the "circuts of lovemountjoy square" (460.09), the problem of squaring the circle is extended to the geography of Dublin. In the trial in I.4, evidence is tendered by "a plain clothes priest

W.P., situate at Nullnull, Medical Square" (86.34-.35); since "Nullnull," like the "zeroic couplet" (284.10), can be construed as the two circles in the Diagram, the Diagram itself is in some way the solution to the problem.[191]

Anaxagoras of Clazomenae (ca.500-428 B.C.) is reputed to have been the first to consider the problem of squaring the circle.[192] According to Maziarz and Greenwood, the interest of the Pythagoreans and others in problems like squaring the circle, trisecting the angle, and duplicating the cube derives from their attempts at solving the wider problem of irrational numbers.[193] In the Meno (82-85), Plato employs the idea of the irrational to demonstrate the existence of reminiscence in a slave boy; if the mind can "remember" irrationals from the realm of the Ideas, they must somehow partake of rationality.[194] The Pythagoreans had founded their philosophy and cosmology on the universal agency of number. When irrational numbers were discovered, the Pythagorean position was delivered a mortal wound; the square had been the very type of the beautiful, and it was then found to contain the irrational in its diagonal. Clearly, number could no longer be considered as the essence. Nevertheless, the Pythagoreans vowed by oath never to divulge the discovery to the people. According to one legend, the first initiate who broke his vow immediately met his death by drowning for his impiety; as Proclus puts it, "those who uncovered and touched this image of life were instantly destroyed and shall remain forever the play of the eternal waves."[195]

The problem of squaring the circle continued to fascinate. Plutarch describes Rome as both square and circular.[196] By this, he may mean simply that Rome is a round city divided into four by two roads, or that Rome is a symbol with a sense similar to that which obtains in alchemy.[197] According to Jung, the squared circle is the alchemical parallel of the fourfold eternal city.[198] Following Vitruvius, Renaissance architecture based itself on a human figure inscribed in a circle and a square, signifying thereby the correspondence of the upper and the lower realms.[199] In his "Mathematicall Praeface," John Dee considers the Vitruvian image as precisely a symbol of man the microcosm in his relation to the macrocosm;[200] he also announces his method of squaring the circle by weight.[201]

In alchemy, the squared circle, by virtue of its "roundness" or "perfect simplicity," is a symbol of the _lapis philosophorum_ ("philosophers' stone")[202] and of the vessel in which the Work occurs. Quoting Dorn, Jung states that the alchemical vessel "must be made 'by a kind of squaring of the circle.' It is essentially a psychic operation, the creation of an inner readiness to accept the archetype of the self in whatever subjective form it appears."[203] Moreover, squaring the circle symbolises the _opus alchymicum_ itself, "since it breaks down the original chaotic unity into the four elements and then combines them again into a higher unity. Unity is represented by a circle and the four elements by a square."[204] The two most common psychological symbols of the reconciliation of opposites are said to be the child-hero and the squaring of the circle.[205] As I show in Chapter Five, the vessel is one of A.L.P.'s primary attributes, and since she is the mistress of geometry, the vessel, which is also the Diagram, squares the circle to resurrect H.C.E. In light of my remarks on Gnosticism in Appendix B and elsewhere, it is also interesting to note Jung's opinion that alchemy is the direct continuation of Gnosticism.[206]

Nicholas of Cusa and Giordano Bruno investigated the problem of squaring the circle.[207] During the reformation of the heavenly constellations in Spaccio della bestia trionfante (1584), Momus asks what shall be done with the Triangle, or Delta, and Pallas answers: "it seems fitting to me that it be placed in the hands of the Cardinal of Cusa, so that he can see whether with this he can liberate the disturbed geometricians from that troublesome inquiry into the squaring of the circle, by adapting the circle and triangle to that divine principle of his of the commensuration and coincidence of the maximum and minimum figures [of the angles]."[208] J. Lewis McIntyre notes that Bruno thought the problem of squaring the circle insoluble in the ultimate sense; however, he did consider an approximate solution possible, since a polygon with an infinite number of sides finally becomes congruent with a circle.[209]

The approximate solution imagined by Bruno came to a practical realization in Newton's infinitesimal calculus. The calculus has become a bulwark of modern scientific investigation, despite the philosophical attack directed against the basic concept of the zero-increment by Berkeley, who thought the concept self-contradictory.[210] But even though it still relies on the successive approximations which Bruno regarded as an inferior solution, the calculus does, in effect, square the circle. Joyce refers to Newton's science in the immediate vicinity of the Diagram, implying that the Diagram itself squares the circle. The word infinitesimal is echoed as "infinisissimalls" (298.30) in a passage that describes the operation of the calculus. A.L.P. is referred to as "the constant of fluxion" (297.29), and "fluxions" was Newton's own name for the calculus.[211] There is a reference to Newton directly after the Diagram, in "heaving alljawbreakical expressions out of Sare Isaac's universal of specious aristmystic unsaid" (293.16-.18).[212]

In my opinion, Newton and the infinitesimal calculus are juxtaposed with the Diagram because Joyce sees the calculus as the solution to the problem of squaring the circle. The problem is itself a paradigm for the reconciliation of opposites or of the irrational quantities that bedevilled the Pythagoreans. By one simple manipulation of Joyce's Diagram, a figure is produced which can be said - emblematically, if not mathematically - to represent the squared circle (see Figures 8 and 9).

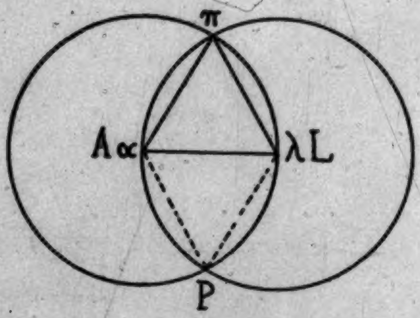


Fig.8. The Diagram in FW,293.

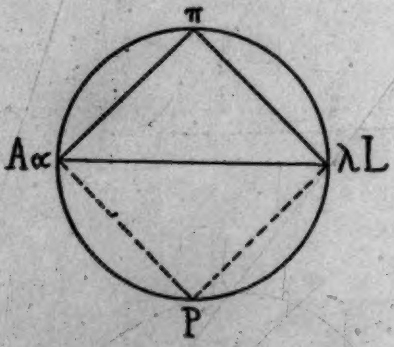


Fig.9. The squared circle.

The two circles in Figure 8 are imagined sliding towards one another until they coincide. Simultaneously, the lozenge παPλ expands, while it maintains contact with both circles at the four points at which it originally touches them; by this process, the lozenge becomes the square πκPλ in Figure 9. Although Joyce does not offer any specific instructions for performing this operation, the possibility is inherent in the Diagram. Newton's calculus, which squares the circle, is associated with A.L.P. (see 297.29). She uses the science to reconstruct H.C.E., who can only be resurrected after opposites are reconciled, as they are when the circle is squared.

CHAPTER FOUR - "FREEMEN'S MAURER": H.C.E. THE FREEMASONIC BUILDER

H.C.E. the masterbuilder: tower and tomb

H.C.E. is the builder who falls and rises with his constructions. A principal image for the fall in Finnegans Wake is the Tower of Babel, along with the confusion of tongues and the consequent proliferation of human languages which occurred there; like the Tower of Babel, Finnegans Wake has "one thousand and one stories" (5.28-.29). H.C.E.'s fall is also related to the Christian concept of the original sin, but Joyce's ideas in this direction are decidedly heretical, Gnostic even, for he imputes that primordial sin to the Creator and not to the creature. However, for Joyce sin is also creative, and there is always a "rise afterfall" (78.07). Building is constructive as well as destructive, and this positive aspect of the theme is developed in H.C.E.'s freemasonry. The freemasonry in Finnegans Wake is a subject which has not received much critical attention, and in this chapter, I trace many specific details of Joyce's use of it. Its adherents identify freemasonry with geometry; two freemasonic geometric figures are of particular relevance in Finnegans Wake, the vesica piscis and Solomon's Seal, and both are metaphors of marriage and the coincidence of opposites. As I show in Chapter Five, the vesica piscis is the emblem of A.L.P., the mother of geometry, so that when H.C.E. builds, it is under the aegis of A.L.P., for woman is the source of both the fall and the rise of man.

As a builder, H.C.E. is consistently identified with Ibsen's Solness. In his Joyce and Ibsen, B. J. Tysdahl traces some thirty-five references to *The Masterbuilder* (*Bygmester Solness*) in *Finnegans Wake*, and he concludes that each one is associated with H.C.E. There is a significant series of parallels between H.C.E. and Solness: both are builders; both have old wives and twin sons and dread the knock on the door of the next generation; both desire young women; and both fall from a ladder.[1] In both cases, the tower is also the phallus of the builder, raised in pride at the tempting sight of a young woman; in *Finnegans Wake*, the "bourgeoismeister" has a "risen stiffstaff" (191.35,.36), and the fall that inevitably occurs after erection is tantamount to detumescence. The *Tunc*-"Cunt" (death-life) reversal which I considered in Chapter Two is the geometrical aspect of H.C.E.'s sexual fall and rise. According to Tysdahl, without the support of the *Bygmester Solness* motif, H.C.E. would be a lowly hod-carrier only, and not the mighty builder who defies God. This claim needs qualification, for as I show, H.C.E. is a freemason, and he gains from his membership in the Craft a prestige which is at least as important as his identification with Solness.

The locus classicus for the definition of H.C.E. as a builder is the fifth paragraph of the book:

> Bygmester Finnegan, of the Stuttering Hand, freemen's maurer, lived in the broadest way immarginable . . . and during mighty odd years this man of hod, cement and edifices in Toper's Thorp piled buildung supra buildung pon the banks for the livers by the Soangso. . . . Oftwhile balbulous, mithre ahead, with goodly trowel in grasp and ivoroiled overalls which he habitacularly fondseed, like Haroun Childeric Eggeberth he would caligulate by multiplicables the alltitude and the malltitude until he seesaw by neatlight of the liquor wheretwin 'twas born, his roundhead staple of other days to rise in undress maisonry upstanded (joygrantit!), a waalworth of a skyerscape of most eyeful hoyth entowerly, erigenating from next to nothing and celescalating the himals and all, hierarchitectitiptitoploftical, with a burning bush abob off its baubletop and with larrons o'toolers clittering up and tombles a'buckets clottering down. (4.18-5.04)

This passage summarizes many of the motifs associated with H.C.E. as the builder: the masterbuilder ("Bygmester"), stuttering, freemasonry ("freemen's maurer"), whiskey as cause and cure of the fall, the phallic tower ("rise in undress maisonry"), and the warring opposites ("larrons o'toolers clittering up and tombles a'buckets clottering down"). Furthermore, as I show in Chapter Five, "larrons o'toolers" and "tombles a'buckets," as Burrus and Caseous, are directly associated with the Diagram (see 59.05-.07 and 165.21-.24), and therefore, so is H.C.E. the builder.[2] Finnegans Wake is filled with instances of the building theme, too numerous to list here. The phrase "where obelisk rises when odalisks fall" (335.33) encapsulates the inverse relationship that obtains between man and woman and that, as I have shown in Chapter Two, is based on "The Mental Traveller."

Since H.C.E. is bound to fall from his tower, it is natural that the tower is also his tomb, as we can see in "that overgrown leadpencil which was soon, monumentally at least, to rise . . . to be his mausoleum" (56.12-.14). In his interview with the Four, H.C.E. boasts of his architectural accomplishments, of "chopes pyramidous and mousselimes and beaconphires and colossets and pensilled turisses for the busspleaches of the summiramies and esplanadas and statuesques and templeogues" (553.10-.12); the Egyptian pyramid was the tomb of the pharaoh. In a description of the Four, reference is made to "the king of the Caucuses, a family all to himself, under geasa, Themistletocles, on his multilingual tombstone" (392.23-.25). A definitely Celtic tone is provided here by the "geasa" (Ir. "taboos"[3]) placed on the tomb and by "Themistletocles," which suggests the Druidic custom of gathering the sacred mistletoe.[4] Standish O'Grady writes extensively on the association in ancient Irish literature of gods with raths and tombs; one of his ideas is that Irish history preserves the oldest records of the Aryans,[5] and perhaps this is why Joyce speaks in one breath of "the king of the Caucuses" and "multilingual tombstone." These two phrases suggest an Indo-European myth; the latter implies that the separate languages which have developed out of the original tongue at Babel are the tokens and the results of H.C.E.'s death and burial. The images of tomb and tower complement one another and, with respect to the doctrine of the coincidence of opposites, are one and the same under different aspects. The tower of H.C.E. collapses and becomes his tomb.

Original sin and the sin of the Creator

H.C.E. requires a tomb because he dies, and his death is owing in part to original sin, as conceived by Christianity. According to Frank Budgen, Joyce quoted De Quincey's observation in The English Mail-Coach that in dreams "each several child of our mysterious race completes for himself the treason of the aboriginal fall."[6] The idea that the original sin is inherited by each child of Adam and Eve stems from St. Augustine (and ultimately, from St. Paul), who considers sin under two aspects, its *reatus* and its *vitium*. By *reatus*, he means that each of his descendants has a "seminal identity" with Adam and therefore shares in the guilt of his sin. I believe Joyce is directly naming this concept in "semenal rations . . . to mack a capital Pee for Pride down there on the batom where Hoddum and Heave" (296.04-.06); the "capital Pee" is the point P in Joyce's Diagram, and it stands for "Pride" because Augustine attributes original sin primarily to pride and an abuse of free will. By the *vitium* of sin, Augustine means the concupiscence which accompanies parentage; sexuality is not equated with original sin, but it is nevertheless closely associated with it.[7] Joyce portrays the fall of H.C.E. in sexual terms, as in "Phall if you but will, rise you must" (4.15-.16); he once put to Arthur Power the question, "you do not agree with Aquinas then, that the act of copulation is the death of the soul?"[8] In Finnegans Wake, A.L.P. makes H.C.E. both rise and fall, as Eve the temptress giving Adam the apple; H.C.E. "thought he weighed a new ton where there felled his first lapapple" (126.16-.17). Like Bloom (U,152, 550)[9] and Newton, H.C.E. discovers the formula for gravity, thirty-two feet per second squared, and its consequence, death; in Finnegans Wake, thirty-two is the number of the father and the fall.[10]

Augustine is important to an understanding of Joyce's concept of the fall; the felix culpa motif recurs consistently. However, as Atherton has pointed out, a sharp distinction must be drawn between the theories of the two, because Joyce attributes the original sin not to man, but to God the Creator.[11] According to Atherton, Joyce is abetted in his heresy by Vico's system, in which each cycle is initiated when its Jove commits again the original sin without which there can be no creation.[12] Another important source of this notion of original sin is Gnosticism; it should be kept in mind that Augustine was at one time a Gnostic. Hans Jonas writes, "a pre-cosmic fall of part of the divine principle underlies the genesis of the world and of human existence in the majority of gnostic systems."[13] This idea is enunciated in Joyce's parody of the opening words of the Paternoster, or "farternoiser" (530.36), as "Ouhr Former who erred in having down to gibbous disdag our darling breed" (530.36-531.01). Again, when H.C.E. advises his auditors, "Weeping shouldst not thou be when man falls but that divine scheming ever adoring be" (563.31-.33), he implies that the Fall is all part of the cunning divine plan. In his study of Joyce, J. G. Brennan speaks of "the Gnostic props and mock-Platonic cosmogonies of *Ulysses* and *Finnegans Wake*,"[14] but I am unaware of any full study of Joyce and Gnosticism. I have drawn out many of the Gnostic parallels to *Finnegans* Wake in Appendix B of the present work. One of the most important of these parallels is that between Sophia and A.L.P., both of whom are involved in the fall and rise of the unified principle.

The attribution of the original sin to the Creator grows, I believe, out of a real psychological need in Joyce himself. It has been suggested by Litz[15] that Joyce may have been attracted to Vico more because of the fear of thunderstorms which they shared than because of any theory Joyce derived from Vico (pertinent to the theme of the fall, incidentally, is Vico's fall at the age of seven from a ladder in his father's library while reaching for a book[16]). Although he was clearly terrified by thunder and lightning, Joyce was able to jest about his fear, as he did when he recounted to Miss Weaver the 1920 visit to Pound in Italy: "in spite of my dread of thunderstorms and detestation of travelling I went there bringing my son with me to act as a lightning conductor."[17] Joyce's fear is evidence that he felt threatened by the traditional instrument of the God of Creation whom he attacks throughout his works.[18] One wonders how far Joyce himself agrees with the Sabellian Stephen Dedalus, who, in his negative criticism of Shakespeare, claims that "Fatherhood, in the sense of conscious begetting, is unknown to man. . . . *Amor matris*, subjective and objective genitive, may be the only true thing in life. Paternity may be a legal fiction" (*U*,207; Joyce's emphasis).[19] The methodical defamation of the male principle in Joyce's works means that the female principle grows in importance as Joyce's art develops.[20] It is an awareness of this tendency which prompts Hugh Kenner to assess Ulysses - and let us presume that he is speaking figuratively - as the record of a masculine civilization turning from ethos to pathos, from active to passive, and of "the feminization toward habit and toward matter of the world of purposefulness, eloquence, and factive energies."[21] In my opinion, the typology is reversed in Finnegans Wake, where the male is utterly moribund, and the female is the source of all life.

The Tower of Babel: the stutter, the fall, and the confusion of tongues

The Fall is announced in the first thunderword on the first page of Finnegans Wake. The ten thunderwords are the sounds of God the Creator's stutter, and this stutter is the audible sign of his inner sin and guilt. The passage "inmaggin a stotterer. Suppoutre him to been one biggermaster Omnibil" (337.18-.19) is taken by Atherton as evidence that God is the first masterbuilder and that the thunder is the stutter of guilt.[22] According to Joyce, it is God's stutter which is the origin of the multitude of human languages:[23] "the sibspeeches of all mankind have foliated (earth seizing them!) from the root of some funner's stotter." (96.30-.31) And this exfoliation of speech is identical with the confusion of tongues and the fall of the architects at the Tower of Babel (Gen. 11). In the confusion of tongues which is Finnegans Wake, the darkest and most confused utterances are the ten sesquipedalian commandments of Divine Providence.

When Joyce calls the Tower of Babel the "Tower of Balbus" (467.16), it is because balbus is Latin for "stuttering."[24] The phrase "Blabus was razing his wall" (552.19-.20) brings to mind an inscription which

Stephen Dedalus reads on a privy wall in A Portrait of the Artist as a Young Man (43; Joyce's emphasis): "Balbus was building a wall." Because this is written in a privy, one would want to compare it with Professor MacHugh's locution in the "Aeolus" episode: "The Roman, like the Englishman who follows in his footsteps, brought to every new shore on which he set foot (on our shore he never set it) only his cloacal obsession. He gazed about him in his toga and he said: It is meet to be here. Let us construct a watercloset." (U,131; Joyce's emphasis) Clearly, building is to be identified with excrement and guilt and sin; in Finnegans Wake, Finnegan piles "buildung supra buildung" (4.27) because his buildings are constructed of dung.

The erection Finnegan is raising in the fifth paragraph of the book is identified with the Tower of Babel in the word "baubletop" (5.02). In Chapter Two, I discussed the passage "shall not Babel be with Lebab?" (258.11-.12) in connection with reversal. The first thunderword itself stutters the first syllable of Babel, as "bababa . . ." (3.15). Among other references to the Tower of Babel in Finnegans Wake are: "the hen that crowed on the turrace of Babbel" (199.30-.31); "babbel men" (254.17); "who caused the scaffolding to be first removed you give orders, babeling" (314.01-.02); "the magpyre's babble towers" (354.27); "static babel" (499.34); and "He has had some indiejestings, poor thing, for quite a while, confused by his tonguer of baubble" (536.07-.08). The original Tower of Babel was built on "a plain in the land of Shinar" (Gen. 11:2); Joyce refers to this location as "shinar" (320.03). Shem's marginal comment, "Rockaby, babel, flatten a wall" (278.L4; Joyce's emphasis), occurs opposite two sentences composed of ten types of men, some of whom "wont to rise a ladder" (278.19-.20) and some of whom "wend to raze a leader" (278.21); the ten types refer back to the ten thunderwords spoken by the Creator, who is responsible for the fall at Babel.

Joyce employs the formula "Go to, let us . . . " twice, in "Go to, let us extol Azrael" (258.07) and in "Go to, let us extell Makal, yea, let us exceedingly extell" (258.14-.15). These exhortations echo the thrice-repeated formula in the account of the Tower of Babel in Gen. 11, in which the builders say to one another, "go to, let us make brick, and burn them thoroughly" (Gen. 11:3), and "go to, let us build us a city and a tower, whose top may reach unto heaven" (Gen. 11:4). The Lord confounds their plans, saying to Himself, "go to, let us go down, and there confound their language, that they may not understand one another's speech" (Gen. 11:7).[25]

Finnegans Wake itself is described as the Tower of Babel by the Four, who speak of "having successfully concluded our tour of bibel" (523.31-.32), that is, of having read the book. The countless tongues which Joyce exploits in Finnegans Wake can be thought of as the confusion of tongues. The one original language is then the English language. H.C.E., the unity who breaks into fragments, identifies himself with English: "I am known throughout the world wherever my good Allenglisches Angleslachsen is spoken" (532.09-.11); this comment occurs in a speech full of the stuttering that indicates his guilt and prefigures the splitting of the etym. Joyce was aware from the early days when he pored over Skeat's Etymological Dictionary that English is a language developed out of many other languages. For Joyce, much of this development is to be identified with the expansion of the British Empire. The speech on FW,497.04-499.03 seems to be saying as much when it lists all the tongues which English has subsumed and all the countries which the British Empire has conquered.[26] As the sun began to set on the Empire in the twentieth century, the multitude of subject states became independent.[27] As the sun sets in Finnegans Wake, H.C.E. and the English language with which he is associated go to sleep, and all the etymological constituents come alive.

Joyce once said of Finnegans Wake, "I have put the language to sleep." And in explaining his new concepts to Max Eastman, he enlarged upon this metaphor of his method: "when morning comes of course everything will be clear again. . . . I'll give them back their English language. I'm not destroying it for good."[28] This evaluation prompts one to conclude that the death and rebirth of H.C.E. is the destruction and renovation of language itself. Ulysses is often thought to have exhausted the possibilities of English. The catalogue reviewing the embryology of the English language in "The Oxen of the Sun" episode ends with the birth of a rough beast, indeed, the barbaric yawp of Alexander J. Dowie, the yankee evangelist who assures the modern world that "The Deity ain't no nickel dime bumshow" (U,428). In Finnegans Wake, Shem expresses his determination to "wipe alley english spooker, multaphoniaksically spuking, off the face of the erse" (178.06-.07); unlike Joyce, he is a member of the Irish language movements which wanted to disentangle and purify Erse from English. Shem's murderous urges should not be taken as the feelings of Joyce, who thought English much more suitable for poetry than Italian, and who called it "the most wonderful language in the world."[29] Exhaustion and death are merely the preludes to new birth in Joyce's view. In Finnegans Wake, A.L.P. is the force which breaks up the old, gathers and unites the fragments, and infuses them with new life.[30]

The creative sin, the gift of tongues, and the rebirth of the builder

According to Helmut Bonheim, good always proceeds out of every fall in Joyce;[31] sin is always the felix culpa. The divine act of creation may be a sin, but sin is also the prerequisite to artistic creation. Stanislaus Joyce writes that at an early age Joyce conceived the idea that "the soul is awakened to spiritual life by sinning - his interpretation of the Fall, and one of the main themes of A Portrait of the Artist."[32]

If the confusion of tongues is a direct consequence of a fall, it may itself yet be the prelude to speaking in tongues. To the inspired reader, the method of Finnegans Wake is glossolalia, not an unmeaning stutter, and the book fulfils the prophecy Joyce makes in the Pola notebook in 1904: "art has the gift of tongues."[33] A Portrait of the Artist as a Young Man concludes with Stephen's diary entry for 27 April. Counting from the events of Easter Week in Chapter V, 27 April would be Ascension Thursday, for which the Gospel of the Proper of the Mass is Mark 16:14-20; it is in this scriptural passage that Jesus commissions the apostles to teach all nations and declares the signs by which his followers will be known: "in my name shall they cast out devils; they shall speak with new tongues."[34] Stephen Dedalus is still seeking the key to pentecostal wisdom in the "Circe" episode of Ulysses when he says "that gesture, not music, not odours, would be a universal language, the gift of tongues rendering visible not the lay sense but the first entelechy, the structural rhythm" (U,432).[35] In Finnegans Wake, Joyce refers to "pentecostal jest" (99.21), "pentecostitis" (130.09), and "pentacosts" (624.34), as tokens of the descent of the Holy Spirit and the gift of tongues upon the apostles; his sacred book is written in all tongues, in "cellelleneteutoslavzendlatinsoundscript" (219.17).

The reunification of the languages which comprise H.C.E.'s "multilingual tombstone" (392.24-.25) is synonymous to his resurrection and the erection of a new tower. The fall from the Tower of Babel is reversed at the very end of the book, when A.L.P. addresses H.C.E. as Ibsen's masterbuilder: "Sometime then, somewhere there, I wrote me hopes and buried the page when I heard Thy voice, ruddery dunner, so loud that none but, and left it to lie till a kissmiss coming. So content me now. Lss. Unbuild and be buildn our bankaloan cottage there and we'll cohabit respectable. The Gowans, ser, for Medem, me. With acute bubel runtoer for to pippup and gopeep where the sterres be. Just to see would we hear how Jove and the peers talk. Amid the soleness. Tilltop, bigmaster! Scale the summit! You're not so giddy any more." (624.03-.12) She exhorts the masterbuilder ("soleness," "bigmaster") who once fell at "bubel" to "Scale the summit!" The phrase "Unbuild and be buildn our bankaloan cottage there" summarizes the central action of Finnegans Wake: H.C.E. falls to pieces, like Humpty Dumpty and Osiris, and Isis-A.L.P. puts him back together again. A.L.P. speaks of the Letter in which she "wrote me hopes and buried the page"; in this context, the Letter is the blueprint for the reconstruction of H.C.E. and his tower.

Freemasonry: H.C.E. as "freemen's maurer"

The positive, constructive aspect of H.C.E. as a builder is conveniently understood through his associations with freemasonry. Although freemasonry has some relationship with Hermetism and Cabbalism, it is primarily a product of the Enlightenment; it is often defined as "a peculiar system of morality, veiled in allegory and illustrated by symbols."[36] These symbols are pre-eminently geometrical and architectural; a more extreme account characterizes modern freemasonry as the remnant of a philosophy which was once the basis of all architecture.[37] It should be added that a distinction is generally drawn between Operative and Speculative Masonry; the former term refers to the guilds engaged in the actual construction of buildings, while the latter is freemasonry as it is known after 1717 (the date of the first lodge in England), having nothing to do with practical architecture as such, but only with its symbolism.

The important fifth paragraph of Finnegans Wake (4.18-5.04), which I have already quoted, describes H.C.E. the builder as a "freemen's maurer" (4.18-.19). These two words are certainly close to the Ger. Freimaurer, which translates "freemason" (the English term is the original upon which translations into all other languages are based[38]), so Campbell and Robinson have some justification for translating Joyce's "freemen's maurer" as "free mason."[39] However, "freemen's maurer" can also be read as "the maurer who works under the orders of the freemen," and this is an entirely different matter. According to Mackey and Singleton's authoritative The History of Freemasonry, the German word Maurer ("wall"; literally, "wall builder") was utilized in mediaeval German stonemasonry to refer to masons of an inferior class performing inferior works, such as roughly placing one stone with another; a Maurer had no commerce with aesthetics or craft, for these were the prerogatives of the Meister ("master"), Gesell ("companion" or "fellow"), Werkmann ("workman" or "craftsman"), and Steinmetz ("stonecutter"). The term Maurer is therefore loosely equivalent to "rough layers" or "rough masons," used in the English Constitutions of lower class masons, as opposed to freemasons proper.[40] Acceptance of this reading for the word Maurer in Joyce's "freemen's maurer" means that Finnegan is simply a common labourer subordinate to his masters the "freemen," who are the authentic freemasons. However, since he is clearly a full freemason in other places, we must also accept the reading of Campbell and Robinson, or else concoct some theory to explain his elevation in status. Perhaps he is elevated as soon as the end of the fifth paragraph, when he has completed his labour and crowned his tower "with a burning bush abob off its baubletop" (5.02), because the burning bush is a freemasonic symbol. According to the Rev. G. Oliver, "in sublime Masonry is a degree called the Knight of the Brazen Serpent, in the decorations of which there is a transparency of a burning bush," with the name of Jahweh written in the flames.[41]

H.C.E. clearly holds a high freemasonic rank later in the book. When he is interviewed by the Four, he raises himself to the level of freemason and speaks of the opposites of tree and stone within himself: "I sept up twinminsters, the pro and the con, my stavekirks wove so norcely of peeled wands and attachatouchy floodmud, now all loosebrick and stonefest, freely masoned, arked for covennanters and shinners' rifuge." (552.03-.06) It should be noted that the "floodmud" is the material out of which building bricks ("loosebrick") are made; in the Diagram chapter (II.2), "mud" is directly associated with A.L.P. ("take your mut for a first beginning," 287.05-.06) and with the very construction of the Diagram: "First mull a mugfull of mud." (286.31) Again, we are given proof that H.C.E.'s tower arises out of A.L.P.

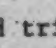
The Shaun-Professor who narrates FW,I.5 boasts, "I am a worker, a tombstone mason, anxious to pleace averyburies and jully glad when Christmas comes his once ayear" (113.34-.35). Shaun is that half of

H.C.E. associated with stone, justice, and death, so it is not surprising that he claims his father's masonic occupation here. Clive Hart thinks that there are overtones of "freemason" in "freedman's" (500.15) and at FW,501.19 (surely this is a misprint),[42] but if he allows these, why not "freeman's" (291.F6) and "freeman's journeymanright" (546.20) as well? The sentence "If all the airish signics of her dipandump helpabit from an Father Hogam till the Mutther Masons could not that Glugg to catch her by the calour of her brideness" (223.03-.06) describes the attempt of Shem-Glugg to guess the colour of a girl, with the help of Irish lore, ranging from masculine ogham to feminine freemasonry. The last is an odd association for Joyce to make, since freemasonry is strictly a masculine organization; there may be a connection with the one woman who became a mason, Elizabeth St. Leger (*vide infra*). Atherton suggests of this passage that the masons make signs ("signics") in the air; "Masons" he identifies with the Mason who invented steel nib pens.[43]

Freemasonic references in 'Finnegans Wake'

My chief aim in this chapter is to establish that the geometrical symbolism found in freemasonry is relevant to the building theme in *Finnegans Wake*. However, before coming to a consideration of that symbolism, I should like to demonstrate the extent of other freemasonic material in the book; in this way, it will be appreciated that the geometrical symbolism is not isolated, but rather forms part of a larger body of material. What follows is a somewhat fragmented examination of freemasonic terminology, signs, passwords, costumes, symbols, and personages, and I beg the reader's indulgence in bearing with me through it.

One of the clearest examples of freemasonic material is at *FW*,35-36. When the Cad asks H.C.E. "how much a clock it was that the clock struck" (35.18-.19), and H.C.E. answers that "it was twelve of em sidereal" (35.33), they are performing a masonic ritual of identification. The masonic catechism of 1724, which, according to Mackey and Singleton, is the authentic source of the original ritual, begins: "1. Q. Peace be here. A. I hope there is. 2. Q. What a-clock is it? A. It is going to Six or going to Twelve."[44]

A few lines later, Shem-Cad is characterized as "several degrees lower than yore triplehydrad snake" (36.06-.07), and H.C.E. stands erect to clear himself of an accusation and "with one Berlin gauntlet chopstuck in the hough of his ellboge (by ancientest signlore his gesture meaning: Ǝ!) pointed at an angle of thirtytwo degrees towards his *duc de Fer's* overgrown milestone as fellow to his gage and after a rendypresent pause averred with solemn emotion's fire: Shsh shake, co-comeraid!" (36.15-.20; Joyce's emphasis). The words "degrees" (which occurs twice), "gauntlet," "ancientest," signlore," "thirtytwo," "fellow," and "solemn emotion's" (read "Solomon," one of freemasonry's heroes) are all suggestive of common masonic terminology; the handshake at the end is undoubtedly masonic as well. The building here ("milestone") is Wellington's monument ("*duc de Fer's*"); the stutter at the very end evokes the guilt and fall at the Tower of Babel. H.C.E. points "at an angle of thirtytwo degrees" because thirty-two is the number of gravity and the Fall, but also because, as Leonard Albert points out in connection with *Ulysses*, "the Masons pass through thirty-two degrees from the Entered Apprentice to the highest Master Mason level."[45] The gesture that H.C.E. makes, "with one Berlin gauntlet chopstuck in the hough of his ellboge," is reminiscent of the masonic sign Leopold Bloom makes in "Circe" when he "*hats himself, steps back, then, plucking at his heart and lifting his right forearm on the square, he gives the sign and dueguard of fellowcraft*" (*U*,456; Joyce's emphasis). The sign "Ǝ," which is said to be the meaning of H.C.E.'s gesture, is only one of many such signs in *Finnegans Wake* and should be compared with the "Doodles family" (299.F4), which are some of the signs Joyce used during composition to indicate the various characters.[46] This backwards *E* is similar to a Mason's Mark, which was a monogram or sign carved on a stone for purposes of identification; such marks could be alphabetical, geometric, or symbolic.[47] Mackey and Singleton see the existence of the Mark Degree in Speculative Masonry as evidence of its relationship to the earlier Operative Masonry. The Mark Man, the first grade of the degree, classifies by placing his mark upon them the stones produced by the stonecutters; the Mark Master, the second grade of the degree, uses the marks to check the correspondences of the stones.[48] Although Joyce never uses it, the so-called triple tau, , is interesting in relationship to H.C.E., because all three of his initials are contained in this masonic mark. The triple tau is featured on the Royal Arch Mason's apron and jewel, inside a triangle and a circle. Rev. George Oliver interprets it as a sign of the Divine Name and eternal life, of the creative, preservative, and destructive powers of God, of the temple of Jerusalem, of Hiram, and of the Hebrew letter *shin*.[49] The triple tau is also associated with the altar of incense in the double cube.[50] Joyce is certainly aware of the tau-cross, as it is used in the *Tunc* page, for instance, where it possibly has a Druidic meaning. In *Finnegans Wake*, the Four plumb the depths of Yawn's mind by placing "that initial T square of burial jade" (486.15) to his temple; they call him "templar" (486.16), which is a masonic order (vide infra).

Ulrich Schneider suggests that Joyce resorts to the numerous masonic signs and passwords in "Circe" as part of a larger pattern of the language of gestures (cf. Stephen's "gesture . . . would be a universal language," U,432).[51] This should be even truer of Finnegans Wake, which adopts Vico's concept of three languages, the first of which is "the divine mental language" (The New Science,929), "a mute language of signs and physical objects having natural relations to the ideas they wished to express" (The New Science,32).[52] It might be concluded that when H.C.E. makes masonic gestures, he is doing so as an inhabitant of Vico's First Age. Quite possibly, the writings of Fabre d'Olivet are also relevant in this connection; "olivetion" (160.11) may be an allusion to his name. Chapter IV of his Hermeneutic Interpretation of the Origin of the Social State of Man and of the Destiny of the Adamic Race (1824) is suggestively entitled "That Man is First Mute and That His First Language Consists of Signs"; one of his occult diagrams, "The Constitution of Man," which is composed of interlacing triangles and circles and symbolizes spirit, soul, and body, is mildly suggestive of Joyce's Diagram.[53]

The freemasons meet in a building known as the lodge.[54] The references to "lodge" at FW,27.29, 136.16, and 564.13 may be to the masonic meeting place. When it is said of A.L.P. that "She's askapot at Nile Lodge" (494.34), it might be concluded that Joyce wishes the reader to think of the fabled Egyptian origin of freemasonry; the Egyptians are said to have devised geometry and masonry under the direction of Euclid in order to close out the Nile in its annual inundation.[55] As far as I have been able to determine, Joyce does not specifically associate Euclid with freemasonry, although both are of importance in connection with the Diagram. As I show in Chapter Five, Joyce invokes the tradition that geometry was invented in Egypt by equating A.L.P. with the Nile, but again, I can find no connection between Egypt and freemasonry in Finnegans Wake.

Various articles of the freemason's costume are to be found scattered throughout Finnegans Wake. "Humpy's apron" (200.32) occurs in a sexual context. Later, an apron is worn by A.L.P. in a passage that defines the sexual connotations of the Diagram: "I'll make you to see figuratleavely the whome of your eternal geomater. And if you flung her headdress on her from under her highlows you'd wheeze whyse Salmonson set his seel on a hexengown. . . . Outer serpumstances beiug ekewilled, we carefully, if she pleats, lift by her seam hem and jabote at the spidsiest of her trickkikant . . . the maidsapron of our A.L.P., fearfully! till its nether nadir is vortically where . . . its naval's napex will have to beandbe." (296.30-297.14) The apron was the first badge of the freemason,[56] and it is his distinctive mark.[57] It has been suggested that the apron originated in the first clothing Adam and Eve donned in their shame;[58] compare this legend with the "figuratleavely" (296.30) in the passage above. The lifting of A.L.P.'s triangular apron in this passage is highly suggestive of the way in which the freemason's apron is worn. There has been a controversy in freemasonry over the way in which the bib, flap, or fall of the apron (that is, the triangular part which hangs down over the cord securing the apron to the waist) should be arranged - up, down, or folded inside;[59] this suggests the lifting of A.L.P.'s apron ("if you flung her headdress," 297.01). Moreover, the Master Mason's apron features three rosettes arranged in a triangle with the point up, which is thought to be female; this triangle interpenetrates the triangle made by the apron, and the two together symbolize fire and water.[60] That is to say, a Solomon's Seal is formed, and this is the figure Joyce refers to in the passage under consideration ("Salmonson set his seel on a hexengown," 297.03-.04). Solomon's Seal is one of the important geometric symbols with freemasonic connotations, and I discuss it below.

During the bedroom scene involving Humperfeldt and Anunska, H.C.E. "square to leg," wears, among other articles of clothing, "his lolleywide towelhat," and he has a "gentleman's grip" (584.15,.17). The freemasons have secret grips or handshakes[61] (see U,501, and below). As for the hat, of which there are several in Finnegans Wake, one authority writes that the "Master . . . always wears his hat."[62] Because of the masonic context in a passage which I have already discussed, the "gauntlet" which H.C.E. wears at FW,36.16 is most certainly the gauntlet attached to the masonic gloves.[63] The "gauntlet" at FW,52.28 may or may not be masonic; there is no supporting context. The same can be said for the various references to "gloves" and "collars," the wearing of which is characteristic of the freemason.[64]

Joyce mentions some of the persons, real and imaginary, who are related with freemasonry. Benjamin Franklin was a freemason. He belonged to the lodge in Philadelphia, the "City of Brotherly Love," and in 1734, he published the earliest work on freemasonry in America, the Book of Constitutions.[65] Shortly before the Diagram in Finnegans Wake, Joyce speaks of a time "ere beam slewed cable or Derzherr, live wire, fired Benjermine Funkling outa th'Empyre, sin righthand son" (289.09-.10). Franklin is here portrayed as Lucifer hurtled from heaven by the lightning bolt in which he discovered electricity. The words "beam" and "cable" suggest building and the fall of Finnegan from the ladder. In freemasonry, the "cable tow" is a symbol of bondage and submission to the lodge.[66] A few lines earlier, there are definite traces of freemasonry in the words "Master," "temple," and "hattrick" (288.20,.21,.22). Although there is no masonic context, another name that may very well be meant as masonic is "Zetland" (544.01). The well known family of Zetland has long been connected with the Craft; the Earl of Zetland was second Grand Master of the United Lodge of England from 1843 to 1870.[67] Noah appears in several masonic legends, especially as a founder. The dove he sends out from the Ark is a masonic symbol, and the Ark itself is thought of as the lodge.[68] Noah, the dove, and the ark, (along with the rainbow, Noah's nakedness, and his inebriation) are significant motifs in Finnegans Wake,[69] but I can discover no specific connection between Noah and freemasonry as far as Joyce is concerned.

To conclude this section, here are two further masonic references in Finnegans Wake. The Gormorgons, who arose in London in 1724 as opponents of freemasonry,[70] are cited by Joyce as "Gormagareen" (376.18). The important masonic functionary known as the Tyler, whose duties are many and varied,[71] is named by Joyce as "tyler" (328.10); because of the "castle" immediately preceding, the adjective "tyled" (183.05) may refer to the Tyler as well.

Joyce and Mozart: the "magic fluke"

In a letter to Harriet Shaw Weaver, Joyce wondered why he had ever been let into "Pound's big brass band" with an instrument such as "my magic flute."[72] Mozart's freemasonic opera The Magic Flute (Die Zauberflöte) appears in Finnegans Wake as "my magic fluke" (451.08). Of the other references to flutes, the only one that can with assurance be connected with Mozart's opera is "flute" (43.32), because of the adjacent masonic imagery in "hat" (43.35), "signum," and "Fellow" (44.03). The Magic Flute, it has been indisputably demonstrated, is a freemasonic allegory, and there is no need to enter into the details here.[73]

Adaline Glasheen thinks that the Aria con coro, No.10, "O Isis and Osiris," from Act II of Mozart's opera, is referred to at FW,470.15-.21, which is a litany beginning "Oasis, cedarous esaltarshoming Leafboughnoon!"[74] Beyond the fact that both works refer to Isis and Osiris (The Magic Flute enunciates their names over and over), there seems to be little evidence for this view. In the aria in question, Sarastro, the high priest of Isis and Osiris, beseeches the two divinities to grant wisdom to the lovers Tamino and Pamina; he asks the Wandrer (Ger., "Wanderer") to give them strength in danger; and he prays that they might gather "der Prüfung Früchte" ("the fruits of their trial"). If they are to die, he adds, let them enter "in euren Wohnsitz auf" ("into thy dwelling place").[75] Glasheen's assumption is certainly unwarranted, for none of this material is echoed in FW,470.15-.21.

However, in the Marcia ("March"), No.9, which immediately precedes Sarastro's invocation, Sarastro and the priests of the Temple are described as entering "jeder mit einem Palmzweige in der Hand" ("each with a palmbranch in his hand").[76] These palms may be echoed at FW,470.17 as "palmost." Sarastro next proclaims that he will be the sponsor of Tamino's initiation into the cult. In Finnegans Wake, the context of the litany at 470.15-.21 is the attempt of Jaun, surrounded by the twenty-nine girls, to fly to heaven with the Letter; he is described as a "concelebrated meednight sunflower" (470.06-.07), corresponding, it may be, to Tamino entering the Temple of the Sun.

Traces of the original plot of The Magic Flute can still be detected in the edited version as we have it. In Brigid Brophy's estimate, the Queen of the Night was good, not wicked, in the original plot; it was Sarastro, rather, who was evil. However, when it was seen that such as arrangement of the moral forces was in direct contradiction to the exclusively masculine, antifeminist membership of freemasonry, it was reversed.[77] Furthermore, suggests Brophy, in the original plot the masonic initiation was accomplished by a descent into the underworld, but as this portrayal would have disclosed too many masonic secrets, it was omitted; all that remains of the original pattern is the ascent into light and the final rebirth.[78] William Mann's interpretation of The Magic Flute is related to Brophy's, in that it emphasizes the role of the Queen of the Night. According to Mann, the Queen once ruled by matrilineal succession, and her consort, the Priest of the Sun, was periodically sacrificed and replaced; her daughter, Pamina, was destined to replace her one day. However, the Priest of the Sun has overthrown the old order in favour of a male succession; he succeeds in securing the new regime by arranging the marriage of his daughter Pamina to Tamino. A new balance is struck, in a patriarchal setting, between male and female, day and night.[79]

I think Joyce employs The Magic Flute as a parallel to Finnegans Wake principally because of this transition from female to male domination in the original plot of Mozart's opera. A.L.P. corresponds to the Queen of the Night, and she controls the underworld that is Finnegans Wake. Her sovereignty is replaced in the morning, at the end of the book, by that of H.C.E.; like The Magic Flute, Finnegans Wake concludes with sunrise and the resurrection of male consciousness.[80] Both works reconcile the opposites through a sacred marriage. In The Magic Flute, Pamina and Papageno extol the virtues and powers of natural love in the Duet, No.7: "Weib, und Mann, reichen an die Gottheit an" ("Wife and Man attain the level of divinity").[81] In the finale, Tamino and Pamina (as well as their foils, Papageno and Papagena) are joined. Finnegans Wake proclaims the "Radium Wedding of Neid and Moorning and the Dawn of Peace, Pure, Perfect and Perpetual, Waking the Weary of the World" (222.18-.20); much later, the reader witnesses the union of "Humperfeldt and Anunska, wedded now evermore in annastomoses by a ground plan of the placehunter" (585.22-.23).

Freemasonry in 'Ulysses' and 'Finnegans Wake'

The freemasonic references in Ulysses are much easier to discern than those in Finnegans Wake, and an examination of the former will aid in uncovering several other masonic references in the latter. The extent of freemasonry in Ulysses has been documented by others,[82] and, following up on Joyce's request to Frank Budgen, just as the last touches were being placed on Ulysses, for "any little handbook of fortune telling by cards . . . [and of] British Freemasonry,"[83] suggestions have been offered as to the identity of Joyce's actual sourcebooks.[84]

There are direct and open allusions to Leopold Bloom as a freemason that will be noticed by anyone. Nosey Flynn thinks Bloom is a member of the "Ancient free and accepted order" (U,177), and the Citizen calls him "that bloody freemason" (U,300); in a litany which recapitulates Bloom's adventures, the Daughters of Erin implore, "Charitable Mason, pray for us" (U,498). Bloom himself acts like a freemason at times; when he paternally stands guard over the body of Stephen at the end of the "Circe" episode, he has "his fingers at his lips in the attitude of secret master" (U,609; Joyce's emphasis). In his excellent article "Freemasonic Signs and Passwords in the 'Circe' Episode," Ulrich Schneider has gone far beyond these obvious instances in demonstrating the wide extent of the esoteric references to freemasonry in Ulysses. With the aid of Schneider's article, I have been able to determine that many of the freemasonic references in Ulysses are repeated in Finnegans Wake; perhaps this indicates that Joyce did not gather much new material on the subject after writing Ulysses. What follows is a comparison of Schneider's examples and explanation with the echoes of these examples which my own investigation has uncovered in Finnegans Wake.

When Stephen Dedalus smashes the chandelier in "Circe," Bella Cohen wants to call the constabulary, but Bloom soothes her with the words "O, I know. Bulldog on the premises. But he's a Trinity student. Patrons of your establishment. Gentlemen that pay the rent. (He makes a masonic sign.) Know what I mean?" (U,585; Joyce's emphasis). As Schneider notes, Bloom represents Stephen as a Trinity College student, and since Stephen studies theology and the Trinity, there is some truth in his claim; "Bloom intimates a plausible association of the English Protestant college and Freemasonry, which in modern Ireland is practiced mainly by the Protestant minority," writes Schneider.[85] I believe that Bloom's identification of Stephen as a Trinity student is repeated in Finnegans Wake in "fell in with a fellows of Trinity" (257.12), because of the masonic connotation of "fellows." The word "fellow" appears elsewhere in obvious masonic contexts at FW,36.19, 44.03, 59.23, and 486.12. One expects the word "Trinity" to refer to the equilateral triangle in Joyce's

Diagram, especially since one of the major clues to the meaning of the Diagram is given a few lines earlier, in "now at rhimba rhomba, now in trippiza trappaza, pleating a pattern Gran Geamatron showed them" (257.03 -.05). The equilateral triangle is a major freemasonic symbol as well,[86] and it may be concluded that Joyce associates his Diagram with the Craft.

When Bloom speaks to a "*sinister figure*" in Spanish, the figure answers, "(*Impassive, raises a signal arm.*) Password. *Sraid Mabbot*" (*U*,436; Joyce's emphasis). These words are the beginning of a series of masonic allusions.[87] In *Finnegans Wake*, "password" appears at 262.07 and 441.36. Another masonic password is delivered in *Ulysses* when, in response to Martha, Bloom says, "(*He murmurs vaguely the past of Ephraim.*) Shitbroleeth" (*U*,457). Schneider tells us that "Shibboleth" is the password of the Fellow Craft, the second degree in Craft Masonry (itself alluded to at *U*,456); the word is taken from Jud. 12:6, where the Ephraimites cannot pronounce the "sh" sound.[88] The word "shibboleth" (267.21) occurs in *Finnegans Wake* in relation with the Name of God, which is, of course, unpronounceable.

Some of the masonic signs employed in *Ulysses* are found again in *Finnegans Wake*. When Bloom is trying to decide whether to follow Zoe into the brothel, she says, "Silent means consent. (*With little parted talons she captures his hand, her forefinger giving to his palm the passtouch of secret monitor, luring him to doom.*)" (*U*,501; Joyce's emphasis). Schneider explains: "the Secret Monitor or Trading Degree is the specific title of a Master who has the duty of helping his brothers in trades and bargains with signs: 'When you take the hand of a brother, if you grip him in the centre of the hand with two fingers, it means desist, if you grip him with one finger, it means proceed' (Ritual, p. 154). In giving the affirmative sign Zoe tells Bloom to proceed in a bargain in which she herself is most interested."[89] Joyce remembers the touch of the Secret Monitor in Finnegans Wake. In the following passage, the man touches the woman, and as with Bloom and Zoe, the bargain is sexual: "'Twas ever so in monitorology since Headmaster Adam became Eva Harte's toucher, in omnibus moribus et temporibus, with man's mischief in his mind." (251.27-.30; Joyce's emphasis) In the Prankquean episode, the heroine "had her four larksical monitrix to touch him his tears" (22.15-.16); that is, the masonic Monitor rites are used by a woman, the Prankquean, to convert Hilary into Tristopher by touch.

When "Bello" Cohen, converted into a man, "Gives a rap with his gavel" (U,540; Joyce's emphasis), he-she is exhibiting the sign of the Master who heads the lodge.[90] In Finnegans Wake, Jaun speaks of "a rap of the gavel" (444.21).

References to specific masonic orders and degrees in Ulysses are to be found repeated in Finnegans Wake. When Major Tweedy appears in "Circe," he "gives the pilgrim warrior's sign of the knights templars" and says, "Rorke's Drift! Up, guards, and at them! Mahal shalal hashbaz" (U,596; Joyce's emphasis). The final three words Schneider explains by Isa. 8:1-4, wherein "Maher-shalal-hash-baz," he says, means "hasten-booty"; it is also the password of the Masonic Knights Templars, whose sign Tweedy gives.[91] In Finnegans Wake, the Four address Yawn as a "templar" (486.16) when they place a T on his temple. In the passage from Ulysses, Tweedy echoes Wellington's words before the final charge at Waterloo, "up, guards, and at them."[92] These very words are a major motif in Finnegans Wake, occurring nineteen times according to Hart's count.[93]

One of the three degrees of the Chivalric Rite is the Masonic Knights Templars. The other two are the Knights of the Red Cross and the Knights of Malta; the former is also named in Ulysses: "It rains dragon's teeth. Armed heroes spring up from the furrows. They exchange in amity the pass of knights of the red cross and fight duels with cavalry sabres." (U,598-599; Joyce's emphasis) The Knights of the Red Cross trace their origin to Darius, who founded the Order as a token of amity with Zerubbabel, prince of Judah and restorer of the Temple in Jerusalem; this Order is said to be "more particularly connected with Symbolic Masonry than any other order of knighthood." One of its ceremonies involves "red cross words" and the interchange of sword blows.[94] Joyce refers to Zerubbabel in Finnegans Wake as "Zerobubble Barrentone" (536.32).[95] The Red Cross itself and the warlike behaviour associated with it he renders as "the white ground of his face all covered with diagonally redcrossed nonfatal mammalian blood" (84.19-.20). The legend of Cadmus and the armed men who sprang from the dragon's teeth, which is juxtaposed with the Red Cross in Ulysses (598-599), is also an important motif in Finnegans Wake (see 18.30-.34), but, as far as I can determine, it has no masonic implications.

One final instance of the transfer of specific masonic references from Ulysses to Finnegans Wake involves the only woman ever to become a freemason. When Nosey Flynn lets it be known that Bloom is a freemason, he also expresses his agreement with the rule of restricting membership to men: "There was one woman, Nosey Flynn said, hid herself in a clock to find out what they do be doing. But be damned but they smelt her out and swore her in on the spot a master mason. That was one of the Saint Legers of Doneraile." (U,177-178) The woman in question was

Elizabeth (ca.1693-1773), daughter of Arthur St. Leger, first Viscount of Doneraile; she observed a secret ceremony at the age of seventeen.[96] Joyce gives the family name in Finnegans Wake, in "Sant Legerleger riding lapsaddlelonglegs up the oakses staircase on muleback like Amaxodias Isteroprotos, hindquarters to the fore and kick to the lift" (498.03-.05). That a woman should be a freemason reverses the natural order of things, but it suits Joyce's purposes to have "Mutther Masons" (223.05) in Finnegans Wake, because it is A.L.P. the Great Mother who provides the Diagram by which the new erection of H.C.E. the "freemen's maurer" (4.18-.19) is possible. Joyce reinforces this reversal with the image of a mule riding upstairs backwards; I have shown in Chapter Three that "the assback bridge" (84.03) refers to the pons asinorum, a nickname for Proposition Five of Euclid's Elements, Book I. "Isteroprotos" (498.04) is "hysteron proteron," a device of rhetorical inversion, as we have seen in Chapter Two. We can be certain that Joyce is referring to masonry and Elizabeth St. Leger in FW,498.03-.05, because there is an echo of another masonic passage in Ulysses. As Leopold Bloom sits in Bella Cohen's parlour, he imagines that a man descending the staircase is Boylan, and he tries to fend off the evil vibrations by making two signs of a Past Master (U,525-526).[97] Immediately after this, Bella Cohen enters, and she and Bloom exchange sex roles, a reversal that foreshadows those which occur in Finnegans Wake. In the "Sant Legerleger" passage (FW,498.03-.05), the words "oakses staircase" recall Bloom's fear that it is his nemesis Blazes Boylan on the staircase.

Freemasonry and geometry

It should now be clear that the freemasonic references in Finnegans

Wake form a significant body of material. We are now in a better position to appreciate Joyce's use of freemasonic geometrical symbolism. According to Mackey and Singleton, geometry and masonry were considered to be one and the same science in the earliest Operative Masonry. This identification was carried over into Speculative Masonry, in which it is openly affirmed in the ritual of the Fellow Craft's degree.[98] The geometrical symbolism which forms the greater part of freemasonic symbolism is thought to be the "débris" of the "lost secrets" of the older freemasons.[99]

In order to construct a geometrical figure, the freemason requires his compasses and his square.[100] Joyce refers to the compasses in "gauge their compass" (57.02) and "unbox your compasses" (287.11).[101] The square appears when H.C.E. has a "square leg" (543.04; one line earlier is "fellows") and when he is "square to leg" (584.15; on the same line is "towelhat," and two lines earlier is "gentleman's grip"). The reference in both cases is to one of the most familiar masonic symbols, the square and the compasses, since the compasses are said in masonry to have "one leg over" or "both legs over" the square.[102] The square[103] also appears alone in a masonic context; when the Four examine Yawn, they place "that initial T square of burial jade" against his "temple" and call him "templar" (486.16,.17).

In freemasonry, the device known as the cubical stone symbolizes human perfection.[104] In Finnegans Wake, the cube is associated with Shaun and H.C.E. As Yawn, Shaun has a "cubical crib" (476.32) when he is questioned by the Four. H.C.E. lives in a "cubehouse" (5.14; note his initials in the word). The reader is warned not to think of H.C.E. as "a rude breathing on the void of to be" (100.27) and is advised to believe in "the canonicity of his existence as a tesseract" (100.34-.35), that is, as a four-dimensional cube which has a real existence; the superhuman perfection defined here may echo the masonic symbolism of the cube.[105] The so-called "double cube" is more common in freemasonry than the cube. William Stirling defines it as an irregular hexagon which precisely contains a vesica piscis, which is the first of the two major freemasonic geometrical figures which I discuss in connection with Joyce's Diagram.[106] While the cube and the double cube are generally abstract concepts, the "quoin" is actually a stone; the word is used in reference to a cornerstone, a square stone at the angle of a wall, or a stone in an arch.[107] This word may be part of the meaning of Joyce's word "Quoint" (299.08); "Ollover Krumwall," who is sometimes considered to be a founder of masonry, is named in the next line.[108]

One geometric form which is of especial significance for the freemasons is the equilateral triangle; since they often think of this triangle as it is constructed by Euclid's First Proposition, one might want to associate the freemasonic equilateral triangle with that one constructed in Joyce's Diagram, which, as we have seen, duplicates the illustration for that Proposition. According to Mackey and Singleton, "the equilateral triangle which Palfrey says was probably the basis of most of the formations of the Operative Freemasons has become the most sacred of the symbols of their speculative descendants."[109] The equilateral triangle with a dot in its centre is said to be a freemasonic symbol of the omnipotent God.[110] However, the two figures with which I am particularly concerned here are the vesica piscis and Solomon's Seal, for there is direct evidence that Joyce connects both with his Diagram, and both are freemasonic symbols (although as I show here and elsewhere, they are not exclusively freemasonic). The shape of Solomon's Seal, two interlaced equilateral triangles, is familiar enough. The vesica piscis may be defined as the aperture cut out when two circles intersect one another so that the circumference of each passes through the centre of the other; the Latin term is commonly translated as "the bladder of a fish," by reason of its piscine shape.

Joyce's Diagram, the 'vesica piscis,' Solomon, and the fish

The vesica piscis is called by Mackey and Singleton "one of the most ineffable secrets of the Masonic lodges."[111] The freemasons generally associate it with Euclid's First Proposition, in which it is the aperture formed by the intersection of the two circles.[112] The masonic writer Sydney T. Klein, discussing the effect upon the ancient world of the discovery that a right angle could be constructed by joining the vertex of an equilateral triangle to the centre of its base, as in Proposition Eleven of the Elements, Book I,[113] observes:

> this Equilateral Triangle was the earliest symbol, in connection with the Vesica Piscis, we know of the Divine Logos and, as the Bible declared that the Universe was created by the Logos (the Word) so the form of the Lodge which represents the Universe was naturally created by means of the Equilateral Triangle. . . . But in what awe and reverence must they have held Geometry when they further found that the Equilateral Triangle was itself generated, as in the first problem of Euclid, upon which the whole Science of Geometry was therefore based, by the intersection of two circles. This figure was not only looked upon as a symbol of the Three Divine personae, but that part of the figure which is bounded by the arcs of the two circles and which takes to itself one-third of each of the two generating circles (making its perifera exactly equal with that remaining to each of the two circles, all three therefore being co-equal), and in which the triangle is formed, was naturally held from earliest times as the most sacred Christian emblem, namely that of regeneration or new birth.[114]

As we shall see in Chapter Five, the vesica piscis as the emblem of "regeneration or new birth" belongs to A.L.P. Klein's passage brings together many of the concerns of the present study: Euclid's First Proposition, the equilateral triangle, the vesica piscis, and freemasonry; implicit is Plato's concept of the triangle as expressed in the Timaeus.[115]

The freemasonic interpretation of the vesica piscis can be made more specific than the preceding. According to Oliver, the figure is "the great and enduring secret of our ancient brethren" in sacred architecture,[116] and "will give the dimensions of the tabernacle and temple, the altar, the cross, and the triple tau."[117] More practically, the vesica piscis is a favourite Mason's Mark, that is, a sign cut in a stone for purposes of identification.[118]

Apart from freemasonry, the vesica piscis was used in the plans of churches from all periods, from St. John Lateran to old St. Peter's and the Abbey Church of Bath; in Norman and Gothic buildings, it appears in choirs, chancels, porches, doors, arches, windows, pinnacles, and spires.[119] In The Book of Architecture (1537-75), Sebastiano Serlio describes a method for the construction of ovals that depends upon the formation of a vesica piscis by the intersection of two circles.[120]

Since Joyce's Diagram is for all practical purposes identical with the illustration for Euclid's First Proposition, it naturally contains the vesica piscis. In Figure 10, the vesica piscis is the shaded area.

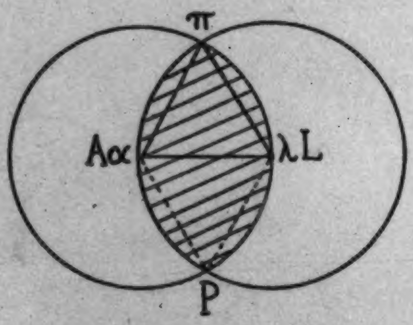


Fig.10. The vesica piscis in Joyce's Diagram.

Joyce does not employ the term vesica piscis in so many words, but he alludes to it unmistakably. Among the items that comprise "Shem's bodily getup" (169.11) are "a salmonkelt's thinskin, eelsblood in his cold toes, a bladder tristended" (169.19-.20). The combination of "salmon" (in "salmonkelt's") and "bladder" gives vesica piscis (L., "bladder of a fish"). Furthermore, since H.C.E.'s initials are hidden in "eelsblood in his cold," H.C.E. is also identified with the vesica piscis; the "salmon" in "salmonkelt's" implies "Solomon," who is equated with H.C.E. via the fish symbol in Finnegans Wake, as I show momentarily. A second allusion to the vesica piscis is made when Shaun describes Shem as "Fish hands Macsorley! . . . swimmyease bladdhers" (408.25-.27). Adaline Glasheen and Leo Knuth have commented briefly on the vesica piscis in Finnegans Wake, but neither has drawn attention to these two passages.[121]

Even though both freemasonry and Joyce's Diagram use the vesica piscis, this alone is not proof that Joyce is thinking of the freemasonic symbolism in regards to his Diagram. To prove that he is, the following chain of connections has to be established. First of all, Joyce alludes to the fact that Solomon is a masonic hero; second, Solomon and H.C.E. are linked through the fish symbol; and third, the fish symbol is connected to the Diagram. Therefore, the Diagram partakes of freemasonic symbolism.

The modern tendency in freemasonry is to think of Solomon as the first Grand Master; masonry is often said to have begun at the building of the Temple of Solomon[122] (a variant of the origin myth ascribes the beginnings to the Tower of Babel[123]). Joyce refers to Solomon in "Solemonities" (188.25), and two lines later, he uses the word "Gee!" (188.27). The letter G is extremely common in freemasonry; a member of the Fellow Craft is called "a letter-G man." The G probably stands for "Geometry."[124] Here is an immediate connection between Solomon the freemason and the Diagram, apart from the chain of connections which I have promised to establish. Joyce knew of the G symbolism, because he has Bloom think, "father a G man" (U,162).[125] One wonders, incidentally, if there is any significance to the fact that the letter g is missing from its place in the otherwise complete list of the alphabet as colours at FW, 247.35-248.02. A second example of Joyce's portrayal of Solomon as a masonic hero is more considerable than the first, because Solomon, fish, and masonry are mentioned in one passage: "what with one man's fish and a dozen men's poissons . . . I'd come out with my magic fluke . . . By the unsleeping Solman Annadromus, ye god of little pescies, nothing would stop me." (451.05-.11) As I have shown, "my magic fluke" refers to Mozart's masonic opera The Magic Flute; Solomon is named as "Solman"; fish references are in "fish," "poissons," "Solman," and "pescies."

The second link in the chain of connections that I wish to demonstrate is Solomon as the fish, specifically the salmon. The passage FW, 451.05-.11 suggests this imagery, but it is more apparent elsewhere, as in "that semeliminal salmon solemonly angled" (337.09-.10) and in "soloweys . . . Laxembraghs" (330.08-.09); in the latter, "Lax" in "Laxembragh" is English for the Swedish or Norwegian salmon. The passage "they saw him shoot swift up her sheba sheath, like any gay lord salomon" (198.03-.04) combines Solomon's function as fish and as sexual emblem; a salmon swimming up-river to spawn is conflated with the union of Solomon and Sheba, and the context is swimming with other fish, including a whale, a grayling, and a "codfisck" (197.36, 198.09). Since H.C.E. is also the salmon in Finnegans Wake, Solomon and H.C.E. are one; moreover, they are both freemasons. H.C.E. is the "Salmosalar" who is "smolten in our mist" (7.16,.17); *Salmo salar* is the scientific term for salmon, and "smolt" ("smolten") is the second stage in a salmon's development, while a few pages earlier, "parr" ("oldparr," 3.17) is the first.[126] Joyce makes Solomon into a salmon because of the similarity of the two words. However, he strengthens the association by the coincidence of two facts: Finn MacCool became wise by sucking his thumb while preparing the salmon of wisdom and then eating the salmon,[127] and Solomon is proverbial for his wisdom. In her final monologue, A.L.P. advises H.C.E., "you'll sing thumb a bit and then wise your selmon on it" (625.16).

The third and final link in the chain of connections is the association Joyce makes between the fish and his Diagram. We have already seen that he refers to the *vesica piscis* at *FW*,169.19-.20 and 408.25-.27; if the figure is inherent in the Diagram, then these references must certainly be to the Diagram. In the following passage, the construction of the Diagram is specifically described in terms of fish: "lettin olfac be the extensh of the supperfishies, lamme the curves of their scaligerance and pesk the everurge flossity of their pectoralium, them little salty populators . . . . was all of a libidous pickpuckparty and raid on a wriggolo finsky doodah in testimonials to their early bisectualism." (524.30-.36) The words "olfac," "lamme," and "pesk," are clearly the points αλπ and ALP of the Diagram; "curves" and "supperfishies" ("superficies") are geometrical terms; "bisectualism" resonates with the "straight road down the centre (see relief map) bisexes the park" (564.10-.11), which, as I have shown in Chapter Three, refers to the line αλ bisecting the lozenge in the Diagram. Various references to fish are in "supperfishies," "scaligerance," "pesk," "salty populators," and "wriggolo." There is a traditional association between the fish and part of the Diagram that might be relevant here, but only because of the structural analogy, and not because Joyce refers to it (although he does mention "rhombus" and "lozenge"). The figure in the Diagram formed by the two triangles inside the vesica piscis is known in heraldry as a rhombus, fusill, lozenge, or mascle, and this figure is identified with the fish because, as John Guillim writes in 1660, the mascle represents the "Mash" ("mesh") of a fishing net.[128]

The preceding is, I believe, sufficient to prove that the vesica piscis in Joyce's Diagram carries freemasonic overtones. As I have shown, the vesica piscis is the freemasonic key to sacred architecture, and it is the source from which are generated the very dimensions of the Temple. In the same way, Joyce's Diagram is the key to the reconstruction of the fallen tower of H.C.E. In Chapter Five, I show that the vesica piscis is also a symbol of the feminine; such polyvalence of the symbol is ideal for the plot of Finnegans Wake, since it is A.L.P., as the "eternal geomater" (296.31-297.01), who is responsible for the resurrection of H.C.E. This resurrection depends upon the reconciliation of opposites, and the vesica piscis can also serve as the sign of a divine marriage;[129] like the lozenge, it signifies "l'union du ciel et de la terre, des mondes inférieurs et supérieurs et, à ce seul titre, elle convient déjà parfaitement à l'encadrement des humains sanctifiés. Elle symbolise le dépassement du dualisme matière-esprit, eau-feu, ciel-terre, dans une unité harmonieusement réalisée."[130]

It might be added here that the fish and the vesica piscis are also both symbols of Christ and that Christ is also associated with Joyce's Diagram. I would tend to attribute this association, first, to the connection of the Diagram with the *Tunc* page and, second, to the Resurrection of Christ, which is an analogue of the resurrection of H.C.E. via the Diagram. If one takes the initial letters of Christ's name and titles in Greek, Ἰησοῦς Χριστός, θεοῦ Υἱός, Σώτηρ ("Jesus Christ, Son of God, Saviour"), the result is ἰχθύς ("fish").[131] Christ is thought to be the fish that is consumed as the Eucharist,[132] and this symbolism should be compared with the attempts of his family to eat "Finfoefom the Fush" (7.09.10) in *Finnegans Wake*. In addition to the fish, the *vesica piscis* is often associated with Christ, although it is also applied to all three Persons of the Trinity and to the Blessed Virgin Mary; it is used extensively in architecture and iconography, and, as Inman points out, a priest's chasuble, when opened out, resembles a *vesica piscis*.[133] Joyce connects Jesus directly to the Diagram in "your apexojesus will be a point of order" (296.10-.11); that is, the apex of the triangle, at point π, is associated with Jesus, and this apex is also the top of the *vesica piscis*.[134]

Joyce's Diagram, Solomon's Seal, and the reconciliation of opposites

The second of the two freemasonic geometrical figures which I wish to consider is Solomon's Seal, and I will do so under two related aspects: the reconciliation of opposites, and the union of the sexes. These meanings are for the most part not freemasonic, but the freemasonic symbolism is based upon them, since writers on freemasonry continually hearken back to them in attempting to puzzle out the implications of Solomon's Seal. Solomon's Seal is without a doubt utilized in freemasonry, especially in Royal Arch Masonry. The Operative Masons in England are claimed to have introduced the sign there by using it as a builder's mark. One masonic lecture (ca.1820) associates the Seal with the "platonic theory of the universe,"[135] presumably, that is, with the cosmology involving the Same and the Other. Like the vesica piscis, Solomon's Seal is connected in freemasonry with architecture, specifically with the construction of the Temple; Solomon is said to have built the Temple using the talismanic powers of the Seal, upon which the Name of God was engraved.[136] In their discussion of the masonic implications of Solomon's Seal, Mackey and Singleton draw attention to the relation between the Seal and the Tetragrammaton in Jewish legend and to the fact that it symbolized the two natures of Christ in Christianity.[137] In his Freemason's Guide and Compendium, B. E. Jones says that the Hindus regarded the hexalpha as the sign of fire and water, and destruction and creation.[138] The fire-water and reconciliation symbolism can be found in the Cabbalists, Boehme, and William Law;[139] this symbolism is clearly summed up in a letter which Yeats wrote to Dorothy Wellesley, in which he discusses the reversals from water to flame in his dreams and poems: "all this may come from the chance that when I was a young man I was accustomed to a Kabalistic ceremony where there were two pillars, one symbolic of water and one of fire. The fire mark is △, the water mark is ▽, these are combined to make Solomon's Seal ✡. The water is sensation, peace, night, silence, indolence; the fire is passion, tension, day, music, energy."[140] Solomon's Seal does not play a role in Yeats's own geometric system; perhaps the upper triangle can be related to the Primary, Objective, Solar phase in A Vision, and the lower triangle to the Antithetical, Subjective, Lunar phase.[141]

The connection between Joyce's Diagram and Solomon's Seal is much easier to establish than that between the Diagram and the vesica piscis, because Joyce directly states this connection: "I'll make you to see figuratleavely the whome of your eternal geomater. And if you flung her headdress on her from under her highlows you'd wheeze whyse Salmonson set his seel on a hexengown." (296.30-297.04) This passage says that if the lower triangle ALP in the Diagram is raised onto the upper triangle αλπ, the result is Solomon's Seal. The word "Salmonson" brings in the Solomon-fish connection and allows us to conclude, as we have seen, that the freemasonic symbolism is implied. Joyce also employs the fire-water duality signified by Solomon's Seal. He refers to the "firewaterloover" (93.07) and "firewater or firstserved firstshot or gulletburn gin or honest brewbarrett beer" (171.13-.14); the latter can be related to Solomon through the context, which includes references to a fish in "piscivore" (171.08) and to one of the materials of Solomon's Temple, the cedars of Lebanon (1 Kings 5:6), in "the kcedron, like a scedar . . . of Lebanon" (171.11-.12). By "firewater," Joyce also means whiskey, and it is whiskey which makes Tim Finnegan fall and rise (see 6.26-.27).[142] Joyce's Diagram unites the principles of fire and water and resurrects H.C.E., who is the coincidence of opposites of his sons Shem and Shaun. The word *Solomon* is particularly suitable for Joyce's mythology, because it contains both "Som" and "Son," that is, Shem and Shaun. When is a man a man? When he's a Solomon.

Related to Solomon's Seal as a symbol of the reconciliation of opposites is its use as a symbol of sexual union; this is not a freemasonic meaning, but it naturally follows from what has gone before, and Joyce definitely uses it. Solomon's Seal is the token of an androgyne deity; the upper triangle is male and the lower female.[143] Robert Graves sees the upper triangle as male and solar, the lower female and lunar; he suggests that the lower triangle is considered to be female because of the characteristic shape of the female pubic mane. Together, the triangles represent sexual desire and the sacred marriage. In view of the resurrection of H.C.E. by A.L.P. in Finnegans Wake, particularly germane is Graves' statement that Solomon's Seal symbolizes man's reliance on woman for his health and that the symbol is "most applicable wherever man is equated with the Sun as power and energy, and woman with the Moon as wisdom and healing."[144] Solomon's Seal is also a symbol of the generation that proceeds from union. Although there is no evidence that Joyce was aware of him, another authority, Manly P. Hall, relates the Seal to the six days of biblical creation and the material universe (which is the fragmentation of the divine fire) to the two triangles forming a lozenge;[145] Joyce relates Solomon's Seal to his Diagram, although no such Seal is to be found there explicitly, but only a lozenge; the Diagram represents the creation of the new man.

In Chapter Two, I came to the conclusion that Joyce's Diagram is male in the upper triangle, female in the lower, and it can now be appreciated that this typology corresponds precisely to the traditional interpretation of Solomon's Seal. In the text, he makes Solomon and Sheba (see 1 Kings 10, 11:1, and 2 Chr. 9) the prototype of sexual union: "they saw him shoot swift up her sheba sheath, like any gay lord salomon." (198.03-.04) One of the items in a list is "solomn one and shebby" (577.08-.09). Sheba reappears at FW,29.26 and 68.21, and, under the name of Balkis, she observes the disrobing of Solomon-H.C.E., as H.C.E. attests in "I considered the lilies on the veldt and unto Balkis did I disclothe mine glory" (543.13-.15).[146] Earlier, the two young girls look at Solomon-H.C.E.'s genitals: "Olive d'Oyly and Winnie Carr . . .

reized the dressing of a salandmon." (279.F21-.22) Sexual revelation in another location is equated with vigorous speech escaping the bonds of censorship; in this particular instance, it seems that the son (Solomon) argues for unveiling, while the mother (Bathsheba; see 2 Sam. 12:24) is for clothing: "Away with covered words, new Solemonities for old Badsheetbaths!" (188.25-.26) Solomon the fish is clearly an image of sexual potency and fecundity in Finnegans Wake and symbolizes the new H.C.E.[147] To take one final instance, Solomon is combined with Dr. Bethel Solomon, president of Dublin's Rotunda Maternity Hospital,[148] to double the inference of sexual generation: "in my bethel of Solyman's I accouched their rotundaties and I turnkeyed most insultantly over raped lutetias in the lock" (542.27-.29); I discuss the key-lock motif in the last chapter. If H.C.E. as Solomon stands for potency, he is still dependent for that potency on A.L.P., the abiding source of sexuality in Finnegans Wake, and if Bathsheba covers herself, A.L.P. has no qualms about exposing herself utterly in the Diagram, as I show in Chapter Five of the present work. Nevertheless, the Diagram also serves as a token of Solomon-H.C.E.'s vigorous nakedness.

The restoration of the Temple

We have seen that both the vesica piscis and Solomon's Seal are directly related to the construction of the Temple. Solomon's Seal is also an image of the reconciliation of opposites, and it is this reconciliation which is the prerequisite to the building of the new H.C.E. and the raising of the new Temple; in the Cabbala, the Temple is "the spiritual union of male and female apart from any fleshly union."[149] The building of the Temple of Solomon (1 Kings 5-9, 2 Chr. 2-8) is regarded as one of the major biblical sanctions for freemasonry. For the masons, the Temple was built to magnify the Lord, for it was the Temple of God. The Operative Masons conceived the Temple as a material edifice, but the Speculative Masons thought of it symbolically and spoke of the Temple of Living Stones.[150]

In Finnegans Wake, H.C.E. boasts of his edifices, which are "freely masoned, arked for covennanters" (552.05-.06). This boast is direct proof that Joyce associates freemasonry with the Temple of Solomon, because the Ark of the Covenant resided in the centre of the Temple (1 Kings 8:8-9). In two other places, Joyces names acacia, or shittim, the material of the Ark (Exod. 25:10), as "accacians" (160.12) and as "shittim" (301.24); the acacia is the freemasonic plant of mourning, immortality, and innocence.[151] One page after the "freely masoned" reference, one of the items in a list of buildings that H.C.E. has constructed is "templeogues" (553.12), or the Temple of Solomon. When the Four place a "T square" on the "temple" of Yawn, the "templar" (486.15,.16), they are, among other things, performing a masonic ceremony in the Temple of Living Stones, Yawn's mind. Possibly, they are using the masonic triple tau, which, as I have shown, may be related to the letters H, C, and E; in the eighteenth century, the triple tau was looked upon in Royal Arch Masonry as a T over an H, standing for Templum Hierosolymae.[152] Earlier in this chapter, I noted that Joyce refers in Ulysses (598-99) and in Finnegans Wake (536.32) to the masonic hero Zerubbabel, who rebuilt the Temple after the Exile; the incidents connected with this restoration are commemorated in certain masonic degrees.[153] There are other references to the Temple in Finnegans Wake, although with none of them can I find a definite masonic context. Joyce names the location of the

Temple, Jerusalem, in "Templetombmount . . . pleasegoodjesusalem" (192.35-.36), and the word "Jeromesolem" (124.35) appears to include "Jerusalem" and "Solomon" (as well as "Jerome" and "Rome").

One of the biblical instructions for the creation of the Ark of the Tabernacle is "thou shalt make a vail of blue, and purple, and scarlet, and fine twined linen of cunning work: with cherubims shall it be made" (Exod. 26:31). This passage is the authority for the Royal Arch Masonry ceremony known as "passing the veils," which Mackey interprets as a symbol of the obstacles to truth, while Lionel Vibert regards it as an allegory of the Jews' perilous journey from Babylon to Jerusalem. The three colours have the following masonic meanings: "blue for universal friendship and benevolence, purple for union, scarlet for fervency and zeal."[154] Joyce refers to the biblical passage and, one would expect, to the freemasonic rite when he wishes that the sleeping Issy "spin blue to scarlad till her temple's veil" (562.09-.10). He has made the veil into the rainbow covering her dormant sexuality; perhaps purple is omitted to say that union is not yet possible because Issy, the potential A.L.P., is still a child. By associating Issy with the construction of the Temple, Joyce states once again that the restoration involves both man and woman. H.C.E. is the builder, but A.L.P. is the mother of geometry, which is the basis of his activities. The Temple and the two principal freemasonic figures by which it is raised in *Finnegans Wake*, the *vesica piscis* and Solomon's Seal, are symbols of the reconciliation and marriage of opposites. How fitting, then, that the letters H.C.E. and A.L.P. can combine to form one word only: CHAPEL.[155]

CHAPTER FIVE - "ETERNAL GEOMATER": A.L.P. THE GODDESS OF GEOMETRY

A.L.P. and the Diagram: sexuality and generation

The Diagram in Finnegans Wake (293) is the hieroglyph of A.L.P.'s powers of life and fecundity. Apart from the fact that it is labelled twice with her initials, the clearest indication of her identity with the Diagram is in a passage in which she is the "eternal geomater" who manifests her sexual geometry:

> I'll make you to see figuratleavely the whome of your eternal geomater. And if you flung her headdress on her from under her highlows you'd wheeze whyse Salmonson set his seel on a hexengown. . . . Outer serpumstances beuig ekewilled, we carefully, if she pleats, lift by her seam hem and jabote at the spidsiest of her trickkikant . . . the maidsapron of our A.L.P., fearfully! till its nether nadir is vortically where . . . its naval's napex will have to beandbe. . . . discinct and isoplural in its . . . sixuous parts, flument, fluvey and fluteous, midden wedge of the stream's your muddy old triagonal delta, fiho miho, plain for you now, appia lippia pluvaville . . . the no niggard spot of her safety vulve, first of all usquiluteral threeingles, (and why wouldn't she sit cressloggedlike the lass that lured a tailor?) the constant of fluxion, Mahamewetma . . . apl lap! This it is an her. (296.30-298.01)

In the statement of Euclid's First Proposition, "Problem ye ferst, construct ann aquilittoral dryankle Probe loom!" (286.19-.20), "ann" is A.L.P.'s forename. To construct the Diagram, one is advised "to find a locus for an alp" (287.09). A.L.P. is the "perimutter" (298.28-.29), or perimeter, who contains all within her omnipresent embrace.

A.L.P. also has regency over mathematics in all its forms. One of the items in her "mamafesta" (104.04) is "The Log of Anny to the Base All" (105.09-.10; Joyce's emphasis). In a permutation of this phrase, "The logos of somewome to that base anything" (298.19-.20), "somewome" can be read as "some womb"; A.L.P. inspires Shem the poet, but she is also the womb of mathematics from which are born the theories of men like Isaac Newton: "heaving alljawbreakical expressions out of old Sare Isaac's universal of specious aristmystic unsaid, A is for Anna like L is for liv." (293.16-.19) To understand this passage, which comes immediately after the Diagram, it should be recalled that Sarah ("Sare") is the mother of Isaac (Gen. 21:3); the mother imparts wisdom to the son, in both poetry and mathematics. A.L.P.'s sexual mathematics is the cause of the fall, as well as the means to H.C.E.'s new erection; in another passage, Newton-H.C.E. is portrayed discovering the force of gravity ("universal of specious aristmystic unsaid," 293.17-.18), that is, the fall of man, by observing Eve-A.L.P.'s apple: "thought he weighed a new ton when there felled his first lapapple." (126.16-.17)

In my discussion of The Book of Kells, I suggested that the three marginal panels in the Tunc page are associated by Joyce with the marginal comments made by Shem, Shaun, and Issy in FW, II.2 as they await sexual initiation via the Diagram. In the Diagram chapter, while Issy comments from the footnotes, Dolph-Shem, who already knows the sexual mysteries of the Diagram, reveals them to Kev-Shaun, who comes to realize that the Diagram has "sixuous parts" (297.22) and a "safety vulve" (297.26-.27) and that it represents A.L.P. revealing her pudendum by sitting "cressloggedlike the lass that lured a tailor" (297.28-.29). In The Great Mother: An Analysis of the Archetype, Erich Neumann gives several examples of such genital exposure in primitive mythology and culture. Concerning a pre-Columbian clay figure of a Mexican goddess, he remarks that "the self-display of the childbearing woman or goddess, the spreading of the legs to exhibit the genital region, represent a ritual act, as is proved by the well-known scene in which Baubo bares herself before the grieving Demeter, and also by the ritual baring of Hathor."[1] Similar figures, with "an unquestionable sacral significance," variously portray Isis, Hecate-Artemis as "a whelping bitch" (this on a scaraboid seal in the archaic Ionian manner), and nude goddesses of ancient Babylon and Syria.[2] A glance at the female genitals is universally thought to be salubrious and to offer magical protection against evil spirits; the image of Shela-na-Gig "who shamelessly exhibits herself has been found over the doors of churches in Ireland."[3] When A.L.P. exposes herself in the Diagram, then, she is performing an ancient rite which is connected with health and, it must be, the resurrection of H.C.E.

As we have seen, H.C.E. is the architect and freemason who constructs his tower. Invariably, both he and his tower fall, and, in time, a new H.C.E. arises to build a new tower. However, he does not rise on his own. A.L.P. is the source of the power that resurrects him, just as she is the cause of his fall; she is the eternal feminine, "the constant of fluxion" (297.29), who abides while he is dead. Whether H.C.E. is a rough mason ("freemen's maurer," 4.18-.19) or a full freemason, he is still dependent upon geometry for his architectural activities. Although freemasonry is, with a few important exceptions such as Elizabeth St. Leger and the Queen of the Night, exclusively masculine, in Finnegans Wake the freemasonic builder H.C.E. relies upon A.L.P. the "eternal geomater" (296.31-297.01) for his knowledge of geometry, which, as we have seen, is considered to be identical with freemasonry. As a freemason, H.C.E. has access to certain geometrical symbols, but he derives them from A.L.P., who wears the masonic apron. Solomon's Seal is a freemasonic sign, but it is also a mark of sexual union and of the union of opposites in general and an emblem of the reconstruction of the Temple and H.C.E. by A.L.P. Similarly, the vesica piscis is found in freemasonry, but its older and wider signification is as a symbol of woman.

The 'vesica piscis' as a female symbol

As the Great Goddess, A.L.P. naturally partakes of the traditional female symbolism of the vesica piscis that is part of her Diagram. According to Inman, the vesica piscis is a symbol of the yoni and the fertile womb.[4] Other authorities say that it is expressive of the mother's creative potency.[5] Its earliest occurrence may be as the sign of a Hindu devotee of the Goddess.[6] In the fifteenth-century painting known as "The Triumph of Venus," famous lovers from all ages encompass a naked Venus inside a vesica piscis.[7] One recent commentator on freemasonry characterizes this figure as "the womb from which are generated all the numbers and ratios of the Temple."[8] It is said that the vesica piscis is a sign of woman in heraldry (although this attribution may result from a misreading of sources).[9]

The vesica piscis was taken over as a symbol by Christianity and stands, among other things, for Mary and her virginity;[10] the Virgin often has a halo in such a form.[11] Thomas Inman describes two woodcuts from a Rosary of the Blessed Virgin Mary (Venice, sixteenth century) in which the vesica piscis appears. In the first of these, a small male figure prostrates itself before a large figure of Mary, who stands in a vesica; Inman equates the female figure with Ishtar and calls it "the Holy Yoni."[12] In the second woodcut, a ray of light from a heavenly dove impregnates with the Christ-child the Virgin's womb, which is shaped like a vesica.[13] In another place, Inman describes Mary as a fertility goddess served by a Catholic priest whose chasuble is in the form of the vesica piscis.[14] As I show below, A.L.P. is associated with the Blessed Virgin Mary, and one of the emblems they have in common is the vesica piscis.

The lozenge and the rhombus

Another geometrical form in Finnegans Wake that symbolizes the female is the lozenge or rhombus formed by the two triangles inside the vesica piscis in the Diagram. As I suggested in Chapter Three, Joyce's use of the word rhombus is derived to some extent from Todhunter's edition of Euclid's Elements; Joyce employs variants of the word in three passages (165.21-.24, 257.03-.05, 286.F1) that show indisputably that he associates the rhombus with the Diagram. Joyce also uses the word lozenge (148.12, 299.28) as a synonym for rhombus. In my discussion of the relationship of The Book of Kells and Finnegans Wake, I established that the quincunx ("quincecunct," 206.35) on the Tunc page is reversed as the lozenge on the "Cunt" page of Finnegans Wake; one represents Crucifixion, the other Resurrection.

In Ulysses, Stephen Dedalus' musings about the "firedrake" which rose in Cassiopeia at Shakespeare's birth (U,210) are derived from Holinshed's Chronicles, in which it is said that this star "with three cheefe fixed stars of the said constellation made a geometricall figure losengwise, of the learned men called a Rhombus."[15] As well as being a descriptive term in alphabets,[16] the word lozenge denotes a Hindu emblem of the yoni; an Etruscan design depicts a clothed woman framing a lozenge on her loins with index fingers and thumbs.[17] In heraldry, the lozenge is the charge upon which the arms of a lady as a maid or widow are always displayed, as opposed to the usual escutcheon for a woman.[18] The mascle, a variant of the lozenge, is now the sign of a divorced woman.[19] The rhombus is one of the emblems of Hecate-Selene;[20] it is also the name of a witch's wheel used as a bull-roarer on the Lupercalia (15 February).[21] It can be concluded from the preceding that in Finnegans Wake, the lozenge or rhombus is the mark of A.L.P., the widow of H.C.E., the wise witch who incants his rebirth, and the source of the erotic power that causes his resurrection.

The triangle: female symbol 'par excellence'

The lozenge is composed of two equilateral triangles in the Diagram, and the triangle is a more familiar symbol of the female than the lozenge itself. In Chapter Three, I showed that John Dee signed himself, as A.L.P. does, with a capital letter delta. We have also seen that Proclus construed Euclid's First Proposition, "on a given finite right line (AB) to construct an equilateral triangle," as an allegory of the two circles of the Nous creating the universe by means of a triangle; in the Timaeus (53-56), Plato himself describes how the various elements are derived from triangles. The freemasons, it was shown in Chapter Four, revered the equilateral triangle.

A triangle was Joyce's symbol for A.L.P. in the composition of Work in Progress,[22] and in the Holograph Workbooks, he writes, "delta = pubic Δ."[23] Anna Livia Plurabelle (1928) has an equilateral triangle gilt-stamped on its cover and other triangles and a rhombus on the spine; further, the first words of A.L.P.'s dialogue are set in the form of a delta (196.01-.03). According to Adaline Glasheen, Shem-Mercius, who "lifts the lifewand and the dumb speak" (195.05), constructs the typographical delta that begins the A.L.P. chapter (I.8) on the next page. This construction is a preliminary to the Diagram chapter (II.2), in which Kev-Shaun assumes that he can learn the secret of the triangle from Dolph-Shem (286.25-.30); echoes of the speech of the washerwomen in the A.L.P. chapter are recognizable in the Diagram chapter (286.30, 287.L1, 294.11-.12, 295.25, and 299.03,.21).[24]

In Ulysses, the triangle on the bottle of Bass's ale is made to carry sexual connotations: "If I had poor luck with Bass's mare perhaps this draught of his may serve me more propensely." (U,416) Joyce recalls the symbol in Finnegans Wake as "The boss's bess bass is the browd of Mullingar" (286.L3; Joyce's emphasis); this sentence is the marginal comment opposite the statement of Euclid's First Proposition, "Concoct an equoangular trillitter" (286.21-.22).[25] Joyce makes explicit the connection of the triangle, the Diagram, and the female sex organs in passages like "A kind of a thinglike all traylogged then pubably it resymbles a pelvic or some kvind then props an acutebacked quadrangle with aslant off ohahnthenth a wenchyoumaycuddler, lying with her royalirish uppershoes among the theeckleaves" (608.22-.26); this passage equates A.L.P. in a sexual posture with the two triangles in the Diagram considered as a "quadrangle." The passage FW,296.30-300.08, to which I have already referred, describes the triangles in the Diagram in forthright sexual terms. In "The Sisters," Uncle Jack advises the boy that he must "learn to box his corner" (Dubliners,11); an allusion to this advice occurs in Finnegans Wake along with a further equation of the sexual triangle and the Diagram: "This is me aunt Julia Bride, your honour, dying to have you languish to scandal in her bosky old delltangle. You don't reckoneyes him? He's Jackot the Horner who boxed in his corner." (465.01-.04)[26] In Chapter Three, I showed how the gnomon is a metaphor of the boy's attempts to understand and complete the deficient world of "The Sisters"; in Finnegans Wake, he and his Uncle Jack are juxtaposed with another geometrical figure, the female triangle, and they are expected to divine its meaning, life.

Joyce is being quite traditional in his acceptance of the triangle as a female symbol; it has a long history of such symbolism. The Greeks regarded delta as a feminine sign.[27] For the Pythagoreans, the triangle was the arché geneseoas, by virtue of its form and its affinity with fecundity; a parallel signification obtained in India.[28] The triangle has been equated with the vulva, especially as matrix,[29] and the genital triangle is emphasized in ancient icons of naked goddesses from throughout the ancient world.[30]

In a passage with sexual implications, Joyce writes concerning A.L.P. that "the cluft that meataxe delt her made her microchasm as gap as down low" (229.23-.24). James Atherton says that this is a quotation from Gargantua and Pantagruel,[31] but there is another important reference here. Double-axes found in clefts and caves in Crete have been interpreted as mimetic images of the thunderbolts and meteorites which cleaved the earth; such cleavage is thought to have represented the marriage of Father Heaven and Mother Earth. The most reknowned cleft is Delphi, which is said to be named after the word delph (Gr. "uterus").[32] In Finnegans Wake, there are references to Delphi and the uterine meaning in "delph" (304.26), "Delphin" (376.11), and "Delphin's" (513.09, 601.22). Joyce uses the word delta in "the cluft that meataxe delt her"

(229.23-.24); other forms of the word can be found at *FW*,119.21, 140.09, 194.23, 197.22, 210.09, 221.13, 297.24, 318.13, 492.09, 600.06, 614.25, and 626.31.

The door of the womb

Closely connected with the delta and triangle motifs is the image of the door. Margaret Solomon has shown in some detail how the door is used in four episodes: the Prankquean (21.05-23.15), the Game of Colours (II.1), the Norwegian captain and the tailor (309.01-355.09), and Buckley and the Russian General (334.22-355.09). In her opinion, the door image is variously a male and a female symbol, a sign of marriage, a bar to the parents' secret affairs, the mark of homosexual union, and the signal for war.[33] Here I am concerned only with the door as a female symbol, that is, as a variant of the triangle symbolism.

In *The Great Mother*, Erich Neumann notes that historically "gate and door are the entrance to the womb of the maternal vessel."[34] The gate of the temple is equated with the womb, and "the innumerable entrance and threshold rites of mankind are an expression of this numinous feminine place."[35] Thomas Inman discusses a symbol of Ashtaroth as the door of generation. In both the Phoenician and Hebrew alphabets, the fourth letter, *daleth*, stands for "door." The plural דַּלְתֵי ("doors") signifies the *labia pudendi*, as in Job 3:10, "it shut not up the doors of my mother's womb." The goddess Artemisias Prothuraia, or the Doorkeeper, was the patroness of birth.[36]

The word *door* occurs with some frequency in *Finnegans Wake*, but only a few mentions are relevant to the door-womb equation. Jaun warns the twenty-nine girls against making love to MacShane "behind locked doors" (438.01) while he is absent. Atherton has shown that "Ani Latch of the postern is thy name" (493.32-.33) is a reference to the Osiris religion and The Papyrus of Ani, in which the aspirant to resurrection had to be equipped with the names of the doors and posterns in the land of the dead;[37] it can be concluded that H.C.E.-Osiris will be reborn to construct another erection when he knows the name of the door-womb of A.L.P.-Isis. A.L.P. is referred to as "dreamydeary" (5.26); therefore, in the passage "The keykeeper of the keys of the seven doors of the dreamadoory in the house of the household of Hecech" (377.01-.03), in which "the seven doors" are also the seven wives of H.C.E., the seven "doors" and the syllable "door" in "dreamadoory" refer to the womb. The symbolism of the key and the lock I discuss below. When the Four exclaim, "--Her door!/ --Ope?/ --See!" (572.09-.11), they are presumably referring to A.L.P.'s sexual door because a few lines later is related the history of the convoluted and bountiful loves of Honuphrius and Anita. Issy refers to the "little passdoor" which is her "apron stage" (146.36, 147.01), and this apron is to be identified with "the maidsapron of our A.L.P." (297.11), mentioned in the long passage defining the sexual nature of the Diagram.[38]

Joyce seemingly anticipated the flood of exegesis which has washed over Finnegans Wake since its publication: "you need hardly spell me how every word will be bound over to carry three score and ten toptypsical readings throughout the book of Doublends Jined (may his forehead be darkened with mud who would sunder!) till Daleth, mahomahouma, who oped it closeth thereof the. Dor." (20.13-.18) Here A.L.P. is both "Daleth" and "door." The word "mud" resonates with Dolph's instructions for constructing the Diagram, "First mull a mugfull of mud, son" (286.31).

The two circles of the Diagram can be compared to the "Doublends" of Finnegans Wake itself; the circles are united in the triangle ("Daleth," "Dor") of A.L.P., who is the Great Goddess reigning over Finnegans Wake, which, since it is circular, has only one "Dor." Later, it is written that H.C.E. "is aldays open for polemypolity's sake when he's not suntimes closed for the love of Janus" (133.18-.19); Janus is the two-headed god of doors (see 272.16, 542.16), so it may be that "Doublends Jined" (20.16) refers to H.C.E. and the book Finnegans Wake. When the Letter is written, H.C.E. is resurrected.

W. Y. Tindall says that the passage FW,20.13-.18 implies that A.L.P. brings death as well as life.[39] In my opinion, the curse "may his forehead be darkened with mud who would sunder" (20.16) may echo an ancient Egyptian ritual of life and death quoted by E. A. Wallis Budge. Horus, blinded by Set, had his eye healed by a daily ritual at the temple of Amen-Rā in Karnak; a priest removed the cord and the seal from the shrine of Horus and prayed: "the cord is broken, the seal is undone, I am come to bring thee the Eye of Horus, thine eye is to thee, O Horus. The mud of the seal is broken, the celestial ocean is penetrated, the intestines of Osiris are drawn out (i.e., fished out of the water). I am not come to destroy the god on his throne, I am come to set the god on his throne."[40] This ritual appears to confirm Tindall's intuition; here the seal is broken and the sun (the eye of Horus) is made whole again, but in Finnegans Wake, the god has just died at FW, 20.13-.18 and has been placed in incubation in the Mother Pot (vide infra), which is sealed until he is ready to resurrect at the end.

Joyce connects both life and death with woman much earlier in his career. In that portion of the notes to Exiles dated 13 November 1913, Joyce writes, meditating on Shelley's grave in Rome, "Shelley whom she has held in her womb or grave rises" (Exiles,118). In Finnegans Wake, A.L.P. has the power of death and life; she controls Shaun-Justius, who "points the deathbone" (193.29), and Shem-Mercius, who "lifts the lifewand" (195.05). Relevant in this connection is Erich Neumann's remark about the setting of the sun in the west, "where it dies and enters into the womb of the underworld that devours it";[41] death and life are associated with the Great Goddess.

The passage FW,20.13-.18 also suggests the marriage ceremony (life), specifically the phrases "whomsoever God hath joined together, let no man put asunder" and "till death us do part," as Margaret Solomon has pointed out;[42] since the passage pertains as well to the structure of Finnegans Wake, the reference to the marriage ceremony would imply that the book itself is a marriage and a coniunctio oppositorum. On the other hand, the door that is closed reminds one of the door Nora slams on Helmer in A Doll's House;[43] the implication in this case would be that the figure of woman in Finnegans Wake has a decisive potency and will.

The door imagery naturally leads to a consideration of the key-lock motif. H.C.E. is the "keykeeper of the keys of the seven doors" (377.01-.02) because the key is his penis, and when he boasts, "in my bethel of Solyman's I accouched their rotundaties and I turnkeyed most insultantly over raped lutetias in the lock" (542.27-.29), he is speaking of his sexual potency. Key and lock are metaphors for the male and female sex organs in the act of copulation that Joyce had already used in Ulysses; Bloom and Stephen effect their departure from 7 Eccles Street by "inserting the barrel of an arruginated male key in the hole of an unstable female lock" (U,703). In Finnegans Wake, it is said of Mr. and

Mrs. Porter, "As keymaster fits the lock it weds so this bally builder to his streamline secret" (560.29-.30). When H.C.E. is described as a tesseract, he is as well "the cluekey to a worldroom beyond the roomwhorld" (100.29). Among the final words in the book are A.L.P.'s "The keys to. Given!" (628.15); the allusion is to Christ's commission, "thou art Peter, and upon this rock I will build my church; and the gates of hell shall not prevail against it. And I will give unto thee the keys of the kingdom of heaven" (Matt. 16:18-19). Part of this commission is also echoed on the first page of *Finnegans Wake*; "thuartpeatrick" (3.10) serves to remind one of Joyce's justification of his use of puns: "the Holy Roman Catholic Apostolic Church was built on a pun. It ought to be good enough for me"[44] (Peter's name Cephas is based on the Aramaic for "rock," and was Graecized, according to this meaning, as Πέτρος; the L. *petra* also means "rock" or "stone"). In light of the key-lock sexual metaphor, the key which A.L.P.-Isis gives at *FW*,628.15 is the resurrected penis (pun) of H.C.E.-Osiris, which opens the lock to a heaven other than the one which Christ envisaged.

The arch and the phoenix

The arch is a female symbol cognate with the door. The Gr. χάμινος ("oven or arched furnace") also refers to the female genitals. The L. *fornix* means both "vault, arch" and "brothel," and hence the word *fornicatio*.[45] Joyce alludes to this Latin etymology, adding the door symbolism for good measure, in "Let a prostitute be whoso stands before a door and winks or parks herself in the fornix near a makeussin wall (sinsin! sinsin!)" (116.16-.18). Later, he includes "prostitute," "arch," and "door" in a passage describing Sistersen returning from a brothel:

"on his way from a protoprostitute (he would always have a (stp!) little pigeoness somewhure with his arch girl, Arcoiris, smockname of Mergyt) just as he was butting in rand the coyner of bad times under a hideful between the rival doors of warm bethels of worship through his boardelhouse fongster." (186.26-.31)

Thomas Inman's consideration of the Assyrian grove, the Ashtaroth symbol, the door, and *fornix* concludes with a remark about the male date-palm, the most important object in the Assyrian grove, and "an emblem of Baal, the sun, the phallus, and life." Known as *tamar* in Phoenician and Hebrew, it was called by the Greeks the *phoenix* (ὁ φοίνιξ).[46] Joyce uses the word *phoenix* several times, as the name of the Egyptian bird of resurrection, as a symbol of the rebirth of H.C.E.-Osiris, and as the name of Dublin's Phoenix Park.[47] However, he shows that he is aware of the sexual connotations of *phoenix*, and perhaps, that he had read either Inman or his sources, when he refers to "the Serpentine in Phornix Park" (80.06); "Phornix" is a combination of *fornix* and *phoenix*, two words that Inman discusses in close proximity. Furthermore, the references to "phoenix" at *FW*,4.17, 55.28, 88.24, 136.35, 332.31, and 553.25, all of which are set in the context of phallicism or sexuality, may be viewed in the light of the phallic meaning of *phoenix*, when it is translated as the "date-palm." Similarly, the references to "date . . . palm" (20.03-.04), "palmsweat" (25.15), "palmy date" (112.26), "palmyways" (117.16), and "his date was palmy" (136.01-.02), because of the sexual contexts, suggest the phallic significance of "date-palm." The Four as voyeurs spy on Tristan and Isolde making love, "with their palms in their hands" (384.17-.18), implying onanism. H.C.E. is described with "arches all portcullised and his nave dates from dots"

(127.36); the references in one phrase to the female symbol, "arch," and the male symbol, "date," make it possible that he is alluding to the Assyrian grove, especially as it is discussed by Inman.

A.L.P. as Dame Geometry

Joyce employs the vesica piscis, the rhombus or lozenge, and the triangle - three related figures - in their many and varied traditional senses to portray the sexuality of A.L.P. However, these symbols are not something added from without, but rather are the natural attributes of A.L.P. in her charactet of Dame Geometry. Joyce calls A.L.P. the "eternal geomater" (296.31-297.01). A.L.P. teaches her children to run and play "now at rhimba rhomba, now in trippiza trappaza, pleating a pattern Gran Geamatron showed them" (257.03-.05); that is, A.L.P. as the Great ("Gran") Earth Mother ("Geamatron"), Gaea, and Grandmother ("Gran") Geometry ("Geamatron") teaches the children to form her characteristic patterns, the rhombus and trapezoid.

Joyce exhibits a sound judgement of archetypes in giving us A.L.P. as Dame Geometry. Erich Neumann has shown that both the primeval and the modern human symbols are abstract, the former because of their identity with the "archetype an sich," which lacks visual components completely, and the latter as a token of abstract thought.[48] The most primitive art, though geometrical, should not be thought of as a negation of life; abstraction attempts to capture the essence of that which is "numinous and utterly different."[49] In the late palaeolithic Spanish cliff paintings and icons gathered by Obermaier, "the geometrization of the figures is no mere abbreviation and simplification, but also produces a concentration of the symbol."[50] Neumann also discusses a

Serbian Mother Goddess figure "whose mouth and breasts are geometrized and represented by a starlike or sunlike symbol."[51]

The figure of Geometria is a type-figure in Western Europe. Martianus Capella, who is a possible source of Joyce's knowledge of the trivium and quadrivium,[52] personifies Geometry as a female pedagogue with a radius, or compass, and a globe.[53] She questions a group of philosophers concerning the construction of an equilateral triangle on a given straight line: "the philosophers in the audience immediately recognize that she is preparing to work out the construction for the first proposition of Euclid and they break into acclaim of Euclid. Geometry, pleased with this approbation of her disciple, snatches from his hand his precious books - which undoubtedly contain the proofs of all the propositions in the thirteen books of the Elements - and gives them to Jupiter as a textbook for the further instruction of the heavenly company."[54] Dante draws an analogy between the seven liberal arts and the seven heavens; in his typology it is also Geometry who hands the books to Jupiter (Convivio,II.xiv.106-07).[55] In a woodcut from Gregor Reisch's Margarita Philosophica (1503), a popular encyclopaedia of its time, Geometry is portrayed as a woman seated at a table covered with planimetric and stereometric models; she bears a sphere and compasses, like Capella's Geometry, and grouped around her are various tradesmen building a house, based on her theory.[56] Two seventeenth-century writers associate geometry with their mistresses. In "A Song of Marke Anthony" (1647), John Cleveland compares his mistress, her bodily parts ("Eyes like Astronomy,/ Streight limbs Geometry"), and the very courtship itself to the seven liberal arts.[57] In the same way, as H. J. Fletcher points out, the commencement oration (1651) of the Cambridge praevaricator Thomas Fuller "is a subdued, almost effeminate comparison of the author's mistress with the various academic arts. She and her amorous toils, arte amandi, were the true logic, poetry, natural philosophy, speculation, the true physica, even the true mathematics."[58]

Yeats associates geometry with a woman in his poem "The Gift of Harun Al-Rashid" (1924). There is a tradition, Yeats tells us in a footnote to the poem, that the Judwali Arabs taught geometry to their young by drawing figures in the sand; these figures were originally uttered in dreams by the wife of Kusta ben Luka. In the poem, a woman speaks in her sleep (or more precisely, a Djinn speaks through her), and the poet listens. On the night of the full moon, she walks in her sleep and draws in the sand emblems which the poet marvels over. He concludes:

> The signs and shapes;
> All those abstractions that you fancied were
> From the great Treatise of Parmenides;
> All, all those gyres and cubes and midnight things
> Are but a new expression of her body
> Drunk with the bitter sweetness of her youth.
> And now my utmost mystery is out.
> A woman's beauty is a storm-tossed banner;
> Under it wisdom stands, and I alone---
> Of all Arabia's lovers I alone---
> Nor dazzled by the embroidery, nor lost
> In the confusion of its night-dark folds,
> Can hear the armed man speak. ("The Gift of Harun Al-Rashid," 181-93)[59]

Yeats's "utmost mystery" is that a woman is the inspiration for the symbolic geometry of A Vision.

God the Mother

Although none of the preceding examples may be the precise source Joyce has in mind, something similar must doubtless be his encouragement for the portrait of A.L.P. as Dame Geometry. The purpose of A.L.P.'s geometry is the reconstruction of H.C.E., and it is principally sexual in character. However, there is another, spiritual side to A.L.P.'s personality. I have already noted in previous chapters the resemblances to A.L.P. of Plato's Necessity, the Gnostic Sophia, Elizabeth St. Leger, and the Queen of the Night in The Magic Flute. In this chapter we shall see that she is the Goddess of poetry and inspiration, but before coming to a consideration of this ultimate role of hers, it is necessary to examine a series of analogies with the higher aspects of the Great Goddess. The first analogy to consider is the manner in which A.L.P. assumes the role of the Christian male God.

Like others before and after him, Nicholas of Cusa conceived God to be an infinite sphere whose centre is everywhere and whose circumference is nowhere. In such a way, Cusa thought the greatest and the smallest would coincide. The famous formula was instrumental in changing the concept of the cosmos from one which was finite and geocentric to an infinite one with no centre, but Nicholas was more concerned with the formula as a means whereby the devotee could attain to a knowledge of the Divine, than as a description of the physical universe.[60] Joyce most certainly transfers Cusa's metaphor of the Christian male God as an infinite sphere to A.L.P., the "eternal geomater" (296.31-297.01) and the "perimutter" (298.28-.29), in this passage: "her redtangles are all abscissan for limitsing this tendency of our Frivulteeny Sexuagesima to expense herselfs as sphere as possible, paradismic perimutter, in all directions on the bend of the unbridalled, the infinisissimalls of her facets becoming manier and manier as the calicolum of her umdescribables (one has thoughts of that eternal Rome) shrinks from schurtiness to scherts." (298.25-299.01) What is being proposed here is that as the number of sides in the original triangular figure increases ("her facets becoming manier and manier") and the sides become infinitely small as in calculus ("infinisissimalls"), the figure gradually becomes a sphere, and an expanding sphere at that ("expense herself as sphere as possible"). The word "infinisissimalls" is meant to suggest the term for the infinitely small unit in the calculus of Isaac Newton, but one should also keep in mind, in Spengler's words, that it was Nicholas of Cusa who "brought into mathematics the 'infinitesimal' principle, that contrapuntal method of number which he reached by deduction from the idea of God as Infinite Being."[61] In the passage under consideration, there also seems to be a play on Cusa's maxima and minima and the question of how the minima can preserve A.L.P.'s modesty as her covering approaches the infinitely small. Joyce combines the sphere with the macrocosm-microcosm concept in other references: "microbemost cosm . . . sphericity of these globes" (151.01-.03), "betune the spheres" (426.25), "Has not my master, Theophrastius Spheropneumaticus, written that the spirit is from the upper circle?" (484.30-.31), and "starey sphere" (503.05). And all of these must in turn be connected with "the cluft that meataxe delt her made her microchasm as gap as down low" (229.23-.24); A.L.P.'s vagina is the "microchasm."

Joyce transfers various attributes of the Christian male God to A.L.P. The opening sentence of the A.L.P. chapter (I.5) is a parody of the Paternoster, and should, one supposes, be known as the "Maternoster": "In the name of Annah the Allmaziful, the Everliving, the Bringer of Plurabilities, haloed be her eve, her singtime sung, her rill be run, unhemmed as it is uneven!" (104.01-.03) Eternal existence, a central attribute of God in Christianity, is in Finnegans Wake predicated of God the Mother: "Anna was at the beginning lives yet and will return."

(277.12-.13) Playing with the concept of the Real Presence of Christ in the Eucharist, Joyce endows woman with the miraculous power of transubstantiation (*vide infra*): "their polite sophykussens in the real presence of devouted Mrs Grumby when her skin was exposed to the air." (413.20-.21) Another example of the displacement of the traditional masculine element in Christianity by a female one can be found in the phrase "pray Magda, Marthe with Luz and Joan" (528.12-.13); here the Four Evangelists, the secretaries of the Holy Ghost, have become women.

Joachim of Floris, one of Stephen Dedalus' heroes, prophesied the advent of the Holy Spirit as a woman.[62] In the nineteenth century, signs of the expectation of such an event were evident in Mariolatry, for instance, and in movements like Saint-Simonianism. The leader of Saint-Simonianism at Ménilmontant, Père Enfantin, declared the coming of the Woman-Messiah and sent messengers to Constantinople to greet Her there. One historian of the movement observes: "1832 a donné le Père; 1833 donnera la Mère. L'Occident a enfanté le Père; 'C'est assez pour toi . . . A toi, Orient, l'enfantement glorieux de la Mère'."[63] Joyce had an interest in such expectations, although I can find no direct reference to Saint-Simonianism itself. Among the entries in the rough notes for "Ithaca" are "God a woman" and "Gynecocracy coming"; R. E. Madtes speculates that the latter may be the source for Molly's idea that "itd be much better for the world to be governed by the women in it" (*U*,778).[64]

A.L.P. and the Blessed Virgin Mary

Hyperdulia, or veneration of the Blessed Virgin Mary (also known to its critics as Mariolatry), was widespread in the decades before

Joyce's birth, and this veneration partook to a certain extent of the tendency in movements like Saint-Simonianism to elevate a woman to divine status.[65] The proclamation of the dogma of the Immaculate Conception in 1854 can be seen as a response to this tendency, as well as further encouragement for growth of the fervour.[66] Like Dante Gabriel Rossetti, who, inspired by Dante's concept of woman as deliverer, developed at the age of nineteen an attraction to Mary as his saviour,[67] the youthful Joyce was devoted to the Virgin and composed at the age of eight a hymn in her honour.[68] He was concerned with virginity in those early days and took the name Aloysius at his Confirmation because Saint Aloysius, shrinking from the touch of a woman, refused to be taken in his mother's embrace.[69] Joyce endows his fictional self with a devotion similar to his own, for Stephen Dedalus recalls the episode in the saint's life in A Portrait of the Artist as a Young Man (242). Stephen is prefect of the sodality of the Blessed Virgin Mary. His anguish at being in a state of mortal sin while leading the prayers in Mary's honour is assuaged by the magnificence of the ritual, the incense, the garments, "her emblems, the lateflowering plant and lateblooming tree, symbolising the agelong gradual growth of her cultus among men" (Portrait,104). Like H.C.E., Stephen has fallen into sin through a woman, and he meditates on the power of another woman, "the refuge of sinners," to raise him up again (Portrait,105; cf. "shinners' rifuge," FW,552.06). An "illuminated scroll," the certificate of his prefecture, hangs on his bedroom wall (Portrait,104). This scroll was to become Finnegans Wake, a paean of praise to Mary-A.L.P., inspired by the illuminations of The Book of Kells and written by a Druid worshipping at the dark altar of the Goddess of life, poetry, and wisdom.[70]

In Finnegans Wake, Joyce invokes the apparition of Mary at Lourdes in "Mother of us all! . . . My Lourde! My Lourde!" (299.03-.06); the Mary of Lourdes is apotheosized as "My Lord," and the context is A.L.P.'s sexual geometry. The apparition at Fatima is cited in a passage that considers history from the female point of view (Fatima is also Mohammed's daughter): "Those were the grandest gynecollege histories . . . in the Janesdanes Lady Andersdaughter Universary . . . for teaching the Fatima Woman history of Fatimiliafamilias, repeating herself, on which purposeth of the spirit of nature as difinely developed in time by psadatepholomy." (389.09-.17) Plainly, A.L.P. is to be identified with the "murthers of gout" (412.31). She swears by "the Vulnerable Virgin's Mary del Dame" (206.06) just previously to her plan to substitute Shem for Shaun (Jacob for Esau). There are several other references to the Blessed Virgin Mary throughout the book;[71] the Angelus, for instance, is alluded to at FW,53.17, 211.16, 239.10, 278.09-.10, and 561.25-.27.

M.-L. von Franz, one of Jung's followers, describes the dream of a Catholic woman that occurred after the declaration of the dogma of the Assumption of the B.V.M. (1950); in the dream, the woman was a Catholic priestess. Von Franz glosses the dream logic as "if Mary is now almost a goddess, she should have priestesses" and wonders if this and other dreams indicate a general trend:

> in the manifestations of the unconscious found in our modern Christian culture, whether Protestant or Catholic, Dr. Jung often observed that there is an unconscious tendency at work to round off our trinitarian formula of the Godhead with a fourth element, which tends to be feminine, dark, and even evil. Actually this fourth element has always existed in the realm of our religious representations, but it was separated from the image of God and became his counterpart, in the form of matter itself (or the lord of matter - i.e., the devil). Now the unconscious seems to want to reunite these extremes, the light having become too bright and the darkness too somber. Naturally it is the central symbol of religion, the image of the Godhead, that

> is most exposed to unconscious tendencies toward transformation.[72]

There are hints of a similar pattern of three and four in *Finnegans Wake*, although I am unable to explicate it thoroughly.[73] The "Antonius-Burrus-Caseous grouptriad" (167.04) is H.C.E.-Shaun-Shem and God the Father-Son-Holy Ghost; the alphabetical sequence *A*, *B*, *C* in the initials seems to require for completion a *D* or *delta*, A.L.P.'s letter. Question 4 (140.08-141.07) invokes the goddess as "a dea o dea!" (140.08), which is also the first letter of the answer ("Dublin"), and asks the Four Old Men to "harmonise" their "abecedeed responses" (140.14).[74] The pattern of four in Question 4 recalls the four things that "ne'er sall fail" (13.20-14.15), and the mention of harmony takes one to the musical staff at *FW*,272.L2, where there are four musical notes, B, C, A, and D. A passage which I have cited above as descriptive of the female sex organs includes three and four as triangle and quadrangle (608.22-.26). If one considers the upper triangle in the Diagram as masculine, then points α, λ, and π might be the two sons and the father; point P below, the fourth point, would then be the female aspect of the Godhead, the lower triangle being dotted to represent the hidden nature of the female.

A.L.P. and Sophia

In Appendix B, I show how A.L.P. is related to the Gnostic Sophia; both are figures connected with the Fall and with the ingathering of the dispersed particles of the divine. Sophia or Wisdom is also a type outside Gnosticism. The Old Testament is full of exhortations to the children of God to apply to maternal Wisdom (see Prov. 2). A twelfth-century manuscript of Herrad of Landsberg, the *Hortus Deliciarum*, depicts a three-headed "Philosophia-Sophia" in the middle of the spheres, surrounded by the artists, poets, and philosophers who serve her.[75] In the *Paradiso* (xxx-xxxiii), Dante is led to the Divine Vision through the white rose of the Virgin of Wisdom.[76] Joyce uses words like "*sophsterliness*" (354.18; Joyce's emphasis), "sophykussens in the real presence" (413.20), and "chthonic solphia" (450.18) to refer to Sophia-A.L.P. Apart from the musical reference in the word "solphia," which suggests that it is Sophia who harmonizes the "abecedeed responses" (140.14), "chthonic solphia" implies that the Goddess in *Finnegans Wake* ascends from beneath the earth or, in terms of Jung's analytical psychology, from the collective unconscious. On the other hand, H.C.E. prays, "descent from above on us, Hagiasofia of Astralia" (552.06-.07); however, "Astralia" is "Australia" as well as the "astral" plane, so Sophia can still be said to ascend from beneath the earth.

A.L.P. and Plato's Necessity

In Chapter Two, I suggested that the sentence "Nircississies are as the doaters of inversion" (526.34-.35) is indebted to a passage in Freud's *Totem and Taboo*. "Necessity is the mother of invention," the original maxim, is transcribed in a manner more faithful to the emphasis on "mother" in "his reverse makes a virtue of necessity while his obverse mars a mother by invention" (133.32-.33). It is my contention that Joyce equates A.L.P. the Mother with Plato's Necessity (ἀνάγκη) in this and other places (see 266.11-.12, 341.13-.14), but most especially in the words "old Moppa Necessity" (207.29).

Anaxagoras' observation that "all things were in chaos or confusion, and then mind came and disposed them" can be taken as a partial epitome of the *Timaeus*.[77] However, both Mind and Necessity are involved in the creation; Mind dictates its plan and persuades Necessity "to bring the greater part of created things to perfection" (*Tim.*,48).[78] Whitehead's observation that European philosophy "consists in a series of footnotes to Plato"[79] is particularly true of the problematical relationship of Mind and Necessity in the *Timaeus*, for an immense critical apparatus has grown up around this relationship; here I must be content to rely on F. M. Cornford's account. He agrees with Grote that Necessity is the opposite of natural law and that it is "the indeterminate, the inconstant, the anomalous, that which can be neither understood nor predicted."[80] Cornford also remarks that if Mind is the craftsman who constructs the cosmos, then Necessity is the material which resists his intentions; the divine Reason projects an optimum plan, but this plan meets resistance from the chaos of Necessity, which continues to exist independently in the cosmos: "the body of the universe is not reduced by Plato to mere extension, but contains motions and active powers which are not instituted by the divine Reason and are perpetually producing undesirable effects."[81]

In the *Timaeus* (48-49), Plato describes three factors in creation: "a pattern intelligible and always the same"; "the imitation of the pattern, generated and visible"; and "the receptacle, and in a manner the nurse, of all generation."[82] These three factors are compared, respectively, to father, child, and mother (*Tim.*,50).[83] It is said of this mother of generation, or space, as it is later (*Tim.*,52) called: "that which is to receive perpetually and through its whole extent the resemblances of all eternal beings ought to be devoid of any particular form. Wherefore, the mother and receptacle of all created and visible and in any way sensible things, is not to be termed earth, or air, or fire, or water, or any of their compounds, or any of the elements from which these are derived, but is an invisible and formless being which receives all things and in some mysterious way partakes of the intelligible, and is most incomprehensible." (Tim.,51)[84] That is to say, space is very like "the Materia Prima of Aquinas . . . related to any material thing" which Joyce describes in "The Bruno Philosophy" (1903), his review of J. Lewis McIntyre's Giordano Bruno (CW,134).

According to Plato, space is the womb of the four elements. In Finnegans Wake, the Four are, inter alia, the four elements, as in this passage: "He askit of the hoothed fireshield but it was untergone into the matthued heaven. He soughed it from the luft but that bore ne mark ne message. He luked upon the bloomingrund where ongly his corns were growning. At last he listed back to beckline how she pranked alone so johntily." (223.29-.33. See also 136.05-.08, 144.33-.34, 172.18-.20, 469.03-.04, 531.29-.30, 540.35-.36) Matthew, Mark, Luke, and John are fire, air (Ger. Luft), earth (Ger. Grund), and water (Ger. Becken is "basin of a port" or "vortex of a whirlpool").[85] In the Prankquean episode, A.L.P. has charge of the Four; she steals Tristopher, and "she had her four owlers masters for to tauch him his tickles" (21.28-.29); she steals Hilary, and "she had her four larksical monitrix for to touch him his tears" (22.15-.16). A.L.P. is the prima materia, and the Four are the four elements.[86] In the Prankquean episode, A.L.P. switches the identities of Hilary and Tristopher,[87] a foreshadowing of the marginal crossover in II.2 and an example of the Jacob-Esau pattern; the twins are also Plato's Same and Other, whose circles cross in the Diagram.

Describing the third type of knowing necessary to apprehend the mother of generation, Plato says that we behold her "as in a dream" and that "we have only this dream-like sense, and we are unable to cast off sleep and determine the truth" (Tim.,52).[88] This language suggests Finnegans Wake, the dream of history woven by A.L.P., the mother of generation.

Plato declares that "the father and creator" made time, the "moving image of eternity" (Tim.,37),[89] while space is the mother of generation (Tim.,49,52);[90] that is, time is masculine, and space is feminine. Joyce repeats Plato's typology when he writes "in this drury world of ours, Father Times and Mother Spacies boil their kettle with their crutch" (600.02-.03). This analogy makes more likely the A.L.P.-Necessity equation. Plato calls his Creator a craftsman, so perhaps we are meant to compare him to H.C.E. the builder and freemason. The difference between the Timaeus and Finnegans Wake is that in the former the masculine Creator is active and potent, working with the grudging cooperation of the feminine Necessity, while in the latter, the masculine power is dead, and the feminine must rebuild the cosmos. Just as Plato's Creator employs the Forms in creating the sensible world, so Joyce's A.L.P. has her Diagram for the reconstruction of H.C.E. Necessity is not divine in Plato, but merely the helpmate of the male Creator, but in Finnegans Wake, A.L.P.-Necessity assumes full divinity, because the male Creator is dead. It should be kept in mind, nevertheless, that the Timaeus is dedicated to the Goddess; near the beginning of the dialogue, Critias declares that his account of the history of Athens will be a hymn of praise "true and worthy of the goddess, on this her day of festival" (Tim.,21).[91]

A.L.P., Gaea the Earth Mother, and Molly Bloom

According to Denis de Rougemont, "woman in the eyes of the druids was a being divine and prophetic."[92] A matriarchy once obtained in Ireland, and it is said that many ancient palaces were built by women; for instance, Tea, wife of Eremon the son of Milesius, constructed a palace in Teamhair at Tara.[93] The "tea" in Finnegans Wake is one of the major motifs; it is associated with A.L.P. and the Letter and, sometimes, with the T of the Tunc page, as, for example, in this P.S. to the Letter: "affectionate largelooking tache of tch. The stain, and that a teastain . . . marked it off on the spout of the moment as a genuine relique of ancient Irish pleasant pottery." (111.19-.23) In another place, Joyce makes unmistakable the identification of A.L.P. with the Irish Tea: "Ever of thee, Anne Lynch, he's deeply draiming! Houseanna! Tea is the Highest! For auld lang Ayternitay!" (406.27-.28) Besides the goddess Tea, Joyce is also thinking of a passage from The Rape of the Lock (III.7-8): "Here Thou, Great Anna! whom three Realms obey,/ Dost sometimes Counsel take - and sometimes Tea."[94] The references to Pope's poem at FW,423.25 and 542.29 seem to form part of the key-lock sexual symbolism.

Mary, Sophia, Necessity, and Tea form an important aspect of A.L.P., but a more substantial part of her personality corresponds to the primitive fertility goddesses described, for example, in Erich Neumann's The Great Mother. Joyce calls the Mother of God "Mater Mary Mercerycordial of the Dripping Nipples" (260.F2) at the beginning of the Diagram chapter; this description endows her with a connection with life that is never apparent in such a fashion in Christianity. As "Gran Geamatron" (257.04-.05) and the "eternal geomater" (296.31-297.01), A.L.P. is Gaea, the Earth Mother, whose womb is the earth.[95] The "Livia" in "Anna Livia Plurabelle" establishes A.L.P.'s connection with life. In several instances, Joyce puns on "Liffey" and "life": "Was liffe worth leaving?" (230.25),[96] "Brook of Life" (264.06), "as if their liffing deepunded on it" (310.05-.06), and "squeezing the life out of the liffey" (512.06). The many occurrences of "life" and its variants in Finnegans Wake are related to A.L.P. as the Creatrix.[97]

Molly Bloom is the precursor of A.L.P., particularly insofar as they both exhibit the characteristics of Gaea, the Great Mother.[98] Joyce once informed Frank Budgen that the "Penelope" episode, Molly's soliloquy, was "perfectly sane full amoral fertilisable untrustworthy engaging shrewd limited prudent indifferent Weib."[99] One of the notes for this episode, now in the British Museum, describes it as "gynomorphic"; A. Walton Litz takes this to mean that "the form of the episode is shaped by the physical characteristics of the female sex."[100]

However, although Molly and A.L.P. are woven from the same cloth, A.L.P. is a larger and more sympathetic character, endowed as she is with the higher spiritual functions.[101] And how different are the positions they occupy in two different, though strangely complementary, fictional universes. I do not think it is necessary to go quite so far as Joyce did when he said, "having written Ulysses about the day, I wanted to write this book [Finnegans Wake] about the night. Otherwise it has no connection with Ulysses . . . There is no connection between the people in Ulysses and the people in Work in Progress."[102] Despite what Joyce says, there are numerous phrases and ideas that are common to the two books, as only a full study could reveal.[103] And yet, as he says, Ulysses is the world of man and the day, Finnegans Wake of woman and the night. The spirit of Molly Bloom broods over the waters of Ulysses, but she is seldom visible to the reader; in Finnegans Wake, H.C.E. spends a great deal of his time in hiding. In the morning of Ulysses, there is talk of the offence to Stephen, "whose mother is beastly dead" (U,8; Joyce's emphasis), but she is reborn that night as Molly Bloom. In Finnegans Wake, the father dies as night begins and is reborn in the morning through the agency of the mother. It is almost as if (and no generalization is without a flaw) the balance between the male and female principles in Ulysses is reversed in Finnegans Wake, in a manner analogous to the reversal in "The Mental Traveller" (cf. FW,293.02-.05).

To say that A.L.P. has a spirituality in her character is not to overlook the predominant sexuality and fecundity which she exhibits. Like Freud's unconscious mind, the universe of Finnegans Wake is pervaded in its every aspect with sexuality, as Margaret Solomon has demonstrated.[104] The abiding source of this sexuality is A.L.P. the Great Mother. The universe of Finnegans Wake is also very much like the world as it is imagined to be by primitive societies. According to Mircea Eliade, in Chapter III of The Forge and the Crucible, entitled "The World Sexualized," such societies regard the universe and everything in it - plants, ores, metals, stones, tools, fire - as endowed with sexuality, and "the most transparent and gynaecological symbolism is to be found in the images connected with the Earth-Mother."[105]

The magic vessel: rebirth and inspiration

The most characteristic instrument of the Earth Mother is the vessel, and the vessel which A.L.P. possesses is strong evidence of her identity with the Earth Mother. According to G. Elliot Smith, "the Mother Pot is really a fundamental conception of all religious beliefs and is almost worldwide in its distribution."[106] Erich Neumann calls the vessel the primary symbol of the feminine; this symbolism follows naturally from woman's posture in coition and generation.[107] Forms of the vessel like the jar, kettle, oven, and retort are representative of the belly.[108] The vessel is a protean symbol of the complex feminine character of containment, protection, nourishment, parturition, transformation, initiation, inspiration, magic, and spiritual transformation.[109]

The Egyptian hieroglyph for womanhood is a pot of water; the glyph is pronounced Nw or Nu, and it is related to the god of waters, Nw (Nu) and the goddess Nut. Of the several occurrences of "nut" in Finnegans Wake, those at 136.02 and 360.15 definitely refer to the goddess. Nut is the goddess of death as well as of life, and of all the opposites; like every Earth Mother, she has a terrible aspect. She endows the stars with souls, but at the same time, she is also "the sow, who devours her own children, sun, moon, and stars in the west."[110] So when Stephen Dedalus says, "Ireland is the old sow that eats her farrow" (Portrait, 203), he is invoking an ancient image of the Terrible Mother. Stephen's metaphor is echoed at FW,91.06, 230.28-.29, 262.19, 448.11, and 490.33.

In one of its variants, the vessel is a magic cauldron which reanimates fallen warriors, as in the legends of Finn, Cuchulain, Arthur, Tristan, and others; similar examples are to be found in ancient Greece, in connection with Medea, Pelops, and Dionysus.[111] In The Mabinogion, the Irish king Matholwch uses just such a cauldron of regeneration in a war against Bendigeid, king of Britain.[112] According to Robert Briffault, the magic cauldron was connected with the Celtic lunar ceremonies of initiation by a common symbolism of death and rebirth.[113] Yeats was familiar with this symbol, for in "The Celtic Element in Literature" (1897), he writes, "the legends of Arthur and his Table, and of the Holy Grail, once, it seems the cauldron of an Irish god, changed the literature of Europe and, it may be . . . the very roots of man's emotions."[114]

In Finnegans Wake, A.L.P. possesses a similar cauldron of rebirth. She sifts through the objects in the midden heap or dump or barrow (the remains of the fallen H.C.E.), in order to recover his parts and reconstitute him. It is she who steals "our historic presents from the past postpropheticals so as to will make us all lordy heirs and ladymaidesses of a pretty nice kettle of fruit" (11.30-.31). As Kate Strong, who, because of the "Tiptip" (79.27) motif, is to be identified with the "mistress Kathe. Tip" (8.08), who is the "janitrix" of the "museyroom" (see 7.36-10.23), A.L.P. portrays for us "old dumplan as she nosed it, a homelike cottage of elvanstone with droppings of biddies, stinkend pusshies, moggies' duggies, rotten witchawubbles, festering rubbages and beggars' bullets" (79.28-.31; note H.C.E.'s initials); H.C.E. died, and she "did most all the scavenging from good King Hamlaugh's gulden dayne" (79.34-.35).

A.L.P. is also the hen scratching on "that fatal midden" (110.25). The article "Archaeology" in the eleventh edition of the Encyclopaedia Britannica remarks "the extensive 'kitchen-middens' of Japan" and observes that "one of the earliest stages of neolithic times is represented by the now well-known kitchen-middens (refuse-heaps) of Denmark."[115] Joyce portrays A.L.P. as an archaeologist scratching in the refuse-heap of history. This portrayal is also a metaphor for his own plan to follow Vico in reconstructing the ideal eternal history from language. The past can be recovered, since nothing is ever lost from the collective memory, A.L.P.

Here is A.L.P. as the Great Mother with her belly-vessel out of which the new is born: "Ansighosa pokes in her potstill to souse at the sop be sodden enow and to hear all the bubbles besaying: the coming man, the future woman, the food that is to build." (246.10-.12) In myth and legend, the magic cauldron is also the cornucopia of unlimited food. The Irish King of Alba had a cauldron that would feed any number.[116] In Lady Gregory's account of Finn's helpers, the Lad of the Skins captures for Finn from the King of the Floods "the great cauldron that is never without meat, but that has always enough in it to feed the whole world."[117] In Finnegans Wake, Shaun accuses Shem of being the spirit of disease and death (189.28-190.01) and admonishes him for not realizing that one can cook a "new Irish stew" (190.01-.09).

H.C.E. as Humpty Dümpty is called out of his tumulus or "broadstone barrow . . . Arise, sir Pompkey Dompkey! Ear! Ear! Wearear!" (568.23-.26). In the following, A.L.P. cooks the fallen warrior H.C.E. in her vessel of regeneration and produces him as the new Gutenberg: "A bone, a pebble, a ramskin; chip them, chap them, cut them up allways; leave them to terracook in the muttheringpot: and Gutenmorg with his cromagnom charter, tintingfast and great primer must once for omniboss step rubrickredd out of the wordpress else is there no virtue more in alcohoran." (20.05-.10) The references here to printing and language are part of the larger pattern of inspiration, which I discuss below. The entire passage is also informed by the alchemical process of death and rebirth, which occurs in the vas Hermetis, as I have shown at length in my thesis "The Alchemists at Finnegans Wake" (1970).[118] The alchemical vessel, or aludel ("a lude all her own," 337.09), is hermetically sealed during the alchemical process; "the book of Doublends Jined" is also sealed: "may his forehead be darkened with mud who would sunder." (20.16-.17)[119] As I noted in Chapter Two, when Joyce writes that "The tasks above are as the flasks below, saith the emerald canticle of Hermes and all's loth and pleasestir" (263.21-.23), he is echoing the second statement of the Smaragdine Tablets: "what is below is like that which is above, and what is above is like that which is below, to accomplish the miracles of one thing."[120] Joyce has given only half the maxim; the remainder is found as "the belowing things ab ove" (154.35). The alchemical vessel is named as "flasks" (263.21), in which one is asked to "pleasestir." A.L.P. ("all's loth and pleasestir") is the things below which produce H.C.E. ("emerald canticle of Hermes"), the things above, by the alchemical process in the vessel; the alchemical metaphor from the Smaragdine Tablets is also to be applied to the Diagram, in which the upper triangle is produced out of the lower, as I have shown. There is a reference elsewhere to the homunculus as the twins, and the proximity of the name of John Dee makes it probable that Joyce thinks of it as the alchemical concept of the little man produced inside the vessel: "Dee, Romunculus Remus." (525.33-.34)[121]

The themes of regeneration and alchemical rebirth are allied to transubstantiation, which H.C.E. denies at his own peril at FW,557.28. The Council of Trent defined the proximate norm of faith with respect to the Eucharist: "in the Eucharist the Body and Blood of the God-man are truly, really, and substantially present for the nourishment of our souls, by reason of the transubstantiation of the bread and wine into the Body and Blood of Christ . . . in this change of substances the unbloody sacrifice of the New Testament is also contained."[122] Joyce favours the metaphor of transubstantiation. He has Stephen Dedalus think of himself as "a priest of eternal imagination, transmuting the daily bread of experience into the radiant body of everliving life" (Portrait, 221). In a recent book, Ulysses on the Liffey, Richard Ellmann extends the Eucharistic theory of art to that work. And in Finnegans Wake, according to Robert Boyle, S.J., in the article "Miracle in Black Ink: A Glance at Joyce's Use of His Eucharistic Image," the artist himself becomes the Eucharist, transaccidentated under the accidents of ink (185.27 -186.08). At FW,7.06-.19, "Finfoefum the Fush" is a Eucharist of bread and ale. According to Church doctrine, Christ is present in each particle of bread and wine.[123] Joyce seems to imply something similar in "a part so ptee does duty for the holos we soon grow to use of an allforabit" (18.36-19.02); he is saying that the letters of the alphabet, the parts, not only comprise the word, the whole, but that as with the Eucharist (and Christ is the Word), the part is the whole. Words themselves are an integral part of the objects they name; in the magical view, the word is the object. In Finnegans Wake, A.L.P., the force of transformation, inspires Shem to magical acts of poetry.

In Egyptian mythology, the Great Mother possessed magical powers, particularly in relation to birth and life, and these powers were invoked at the rituals of resurrection.[124] Among the ancient Celts, women especially were capable of casting potent spells; insofar as magical customs have prevailed in Ireland into modern times, it is women who practise them.[125] In Finnegans Wake, A.L.P. and her avatars are frequently portrayed as witches. The power which the Prankquean wields (21.05-23.15) over the twins certainly has a magical aspect. In the recounting of the four things which never shall fail, the second item, corresponding to A.L.P., begins "566 A.D. On Baalfire's night of this year after deluge a crone" (13.36). The phrase "a peri potmother" (11.09) suggests a "fairy godmother" who has a magic pot or vessel. One of the scavenged items in Kate Strong's cottage is "witchawubbles" (79.31). Much later, in II.1, the dramatic character Kate is introduced as telling "forkings for baschfellors, under purdah of card palmer teaput tosspot Madam d'Elta, during the pawses" (221.12-.14). Later in the chapter, it is written of Shem that anything may happen to him "from a song of a witch to the totter of Blackarss, given a fammished devil, a young sourceress" (251.11-.12). In the Diagram chapter, Issy's footnote "Llong and Shortts Primer of Black and White Wenchcraft" (269.F4) combines magic and grammar; Joyce may be recalling the etymological connection which W. W. Skeat made between gramarye ("magic"), glamour ("magic"), and grammar.[126] Elsewhere a voice casts a spell that is possibly related to ogham: "Quicken, aspen; ash and yew; willow, broom with oak for you." (361.07-.08) Throughout Finnegans Wake, there are other references to witches and witchcraft: "Whichcroft Whorort" (139.33); "Not yet Witchywithcy of Wench struck Fire of his Heath from on Hoath" (175.14-.15; Joyce's emphasis); "Witchman" (245.16); "old relogion's" (317.02); "a witchbefooled legate" (337.03); "watchcraft . . . witch on the heath . . . 'Bansheeba" (468.24,.35,.36); "witching" (509.04).

According to Robert Briffault, the cauldron was the source of inspiration and prophecy, as, for instance, in the legends of Taliesin.[127] A.L.P. is the inspiratrix of Finnegans Wake, and her vessel, the midden heap, and poetry are closely connected. The word "litteringture"

(570.18) is a combination of "litter" and "literature." The midden heap as the source of the Letter and of letters is indicated in "letter from litter" (615.01). When A.L.P. says, "I wrote me hopes and buried the page" (624.04), she hints at the circular nature of reality in Finnegans Wake; A.L.P. both buries and uncovers the Letter. The reference to "a tale of a tub! . . . under one crinoline envelope" (212.21-.23) includes the vessel as "tub" (cf. "he sternely struxk his tete in a tub," 4.21-.22) and the Letter written by A.L.P., which is mailed in a "crinoline envelope." The objects which A.L.P. hides in her midden-hoard-maidenhead are the letters of the alphabet: "A middenhide hoard of objects! Olives, beets, kimmells, dollies, alfrids, beatties, cormacks and daltons." (19.08-.09)

After the tour through the "museyroom," A.L.P. the fairy godmother with her Mother Pot appears:

> Here . . . she comes . . . a peri potmother . . . with peewee and powwows in beggybaggy on her bickybacky and a flick flask fleckflinging its pixylighting pacts' huemeramybows, picking here, pecking there, pussypussy plunderpussy. . . . all spoiled goods go into her nabsack: curtrages and rattlin buttins, nappy spattees and flasks of all nations, clavicures and scampulars, maps, keys and woodpiles of haypennies and moonled brooches with bloodstaned breeks in em, boaston nightgarters and masses of shoesets and nickelly nacks and foder allmicheal and a lugly parson of cates . . . With Kiss. Kiss Criss. Cross Criss. Kiss Cross. Undo lives 'end. Slain. (11.08-.28)

The two principal attributes of the vessel in Finnegans Wake, its power of regenerating H.C.E. and its connection with letters and poetry, are defined in this passage. Most of the objects that go into A.L.P.'s "nabsack" are articles of clothing, which, as we shall see, become H.C.E. when they are assembled. The words "Kiss. Kiss Criss. Cross Criss. Kiss Cross" are the marks of affection at the end of A.L.P.'s Letter (and a reference to the horn-book); the Letter is the instrument of H.C.E.'s resurrection.[128] Near the end of Finnegans Wake, A.L.P. exhorts H.C.E. the builder to become erect: "Tilltop, bigmaster! Scale the summit!" (624.11) He is only able to do so, as A.L.P. says a few lines earlier, because "I wrote me hopes and buried the page when I heard Thy voice, ruddery dunner . . . Unbuild and be buildn our bankaloan cottage" (624.04-.07).

A.L.P. and Isis

The theme of the reconstruction of H.C.E. by A.L.P. the Great Mother with her vessel of regeneration is easily apprehended through Joyce's appeal to the Isis and Osiris story. Isis exhibits many of the attributes of the Great Mother which I have already ascribed to A.L.P. Furthermore, they are both related to Plato's Necessity; according to Plutarch's De Iside et Osiride, Isis is equivalent to space, the nurse of generation in the Timaeus: "Isis is the female principle in nature and that which receives all procreation, and so she is called by Plato . . . the Nurse and the All-receiving, while most people call her the Myriad-named because she is transformed by reason and receives all corporeal and spiritual forms."[129] Just as Isis is characterized as "Myriad-named," so A.L.P. has an "untitled mamafesta" (104.04-107.07), which consists of a long list of her names. Isis, like A.L.P. and Sophia, is the principle of wisdom,[130] and she is the patroness of the Muses.[131] Like A.L.P., she is also the "arbiter in matters of sexual love."[132]

A.L.P. identifies herself with Isis in "What will be is. Is is" (620.32). The name of Isis appears in "isisglass" (486.24), in "Isid" (26.17), and in the litany to Isis and Osiris at FW,470.15-.20, which has a possible connection with The Magic Flute. It is curious to note that the little girl who was the model for Alice in Alice in Wonderland, Alice Pleasance Liddell, shares her initials with Anna Livia Plurabelle; furthermore, the day Lewis Carroll invented the story, he was on a boating excursion with the three Liddell sisters on the Isis River.[133]

According to Plutarch, the body of the immortal Osiris is dismembered time and again by Typhon and reconstructed by Isis; his body is said to be "the sacred Word which the goddess collects and puts together and delivers to those undergoing initiation."[134] This same theme appears throughout Finnegans Wake, beginning at 3.20-.21, but one of the clearest examples is provided by 26.06-.24, in which it is said that "Your heart is in the system of the Shewolf and your crested head is in the tropic of Copricapron. Your feet are in the cloister of Virgo. Your olala is in the region of sahuls" (26.11-.14).[135] The goddess who reunites these bodily parts is named three lines later as "Isid" (26.17). It is interesting to notice that the catasterism, or transposition of the four parts of the body to the stars, in this passage resembles closely the disposition of four parts of the body - Head (Aries), Heart (Cancer), Fall (Libra), and Loins (Capricorn) - upon the Great Wheel of the lunar phases in Yeats's A Vision.[136] Joyce possibly knew that the Golden Dawn had a ritual connected with the gathering of the limbs of Osiris; his word "sahuls" (26.14) echoes the Egyptian word for "soul," sahu, which the Golden Dawn used to identify the astral body.[137]

Plutarch writes that after Isis recovered the body of Osiris at Byblos, Typhon found it, tore it into fourteen pieces, and scattered the pieces on the earth.[138] It is possible that these fourteen parts correspond to the fourteen answers to Shem's riddle "when is a man not a man?" (170.03-.24); appropriately for this purpose, one of the answers is "when wee deader walkner" (170.18), which brings in the resurrection theme via Ibsen. In Plutarch's account, Isis finally retrieved the scattered members, except for the phallus, which had been eaten by fish; she fashioned an image of the phallus and managed to conceive Horus from the united body of Osiris.[139] In every version of the Osiris story, Isis is childless when Osiris is dismembered; E. A. Wallis Budge quotes a passage from the Pyramid Texts which states that Isis conceived Horus in necrogenic contact with Osiris.[140] Atherton believes that this remarkable feat is remembered in Finnegans Wake in the words "How to Pull a Good Horuscoup even when Oldsire is Dead to the World" (105.28-.29; Joyce's emphasis). It should also be noted that in this passage, as well as at FW,26.06-.24 and other places, Joyce identifies Egypt with astrology; here he puns together "horoscope" and Horus' "coup" (his conception and his victory over Set). Possibly Joyce was familiar with Budge's statement that "we have good reason for assigning the birthplace of the horoscope to Egypt."[141]

Again quoting from the Pyramid Texts, Budge gives an alternate version of the dismemberment and restoration of Osiris, in which the central task of reconstitution is attributed to Horus, with Isis and Nephthys acting simply as his assistants.[142] To revive Osiris, Horus employed the words of power.[143] According to Budge, "the earliest name for the formulae found upon amulets is hekau, and it was so necessary for the deceased to be provided with these hekau, or 'words of power,' that . . . a special section was inserted in the Book of the Dead with the object of causing them to come to him from whatever place they were in."[144] Joyce refers to these words of power as "words of silent power" (345.19; his emphasis).[145] H.C.E. is named as "hek" (546.23, 584.05) and as "Hek" (199.24, 411.18, 420.17-.18). At FW,411.18, "Hek" is supported by Egyptian references, "Amen, ptah!" (411.11) and "mummy" (411.17), and one feels justified in equating this permutation of H.C.E.'s name with the Egyptian word hekau.

One can only conclude that Joyce is making use of both versions of the myth of the resurrection of Osiris. The version which emphasizes the role of Isis, I should think, is more important; Joyce invokes her in "My heart, my mother! My heart, my coming forth of darkness!" (493.34-.35), which mimics the speech of The Book of the Dead. The idea that Isis moulds a substitute phallus seems particularly relevant to the theme of the sexual fall and rise in Finnegans Wake. It may be that when A.L.P. vowed to "frame a plan to fake a shine" (206.07), she was thinking of repeating the miracle of Isis; in my discussion of the key-lock symbolism, I suggested that "The keys to" (628.15) which A.L.P. gives is the penis of H.C.E.-Osiris. However, the legend that Osiris was raised up by the words of power should be given a substantial weight as well, for the doctrine of the magic word is of importance in Finnegans Wake. One difficulty is in deciding to which of Joyce's characters Horus is meant to correspond; still, A.L.P. is the source of letters and poetry, so she would be the ultimate agent of resurrection in the case of the magic words of power too. I would expect that a more complete answer to this and other problems connected with the role of Egyptian mythology and religion in Finnegans Wake will have to await an exact determination of Joyce's sources.[146]

The Egyptian origin of geometry: the Nile and the Liffey

Joyce makes use of the legend that geometry originated in Egypt;

A.L.P.-Isis reconstructs H.C.E.-Osiris through geometry. But the only connection that I have been able to discover between Isis and geometry is in a passage in De Iside et Osiride. Plutarch draws attention to two passages from Plato: in the Timaeus (48-50), the three elements in the creation of the world, as we have seen, are compared to a father, mother, and child; in the Republic (546), Plato admires the supreme beauty of the triangle of Pythagoras, which has a vertical of three, base of four, and hypotenuse of five. Plutarch brings together these two passages in order to expound a geometric metaphor of the family of Osiris, Isis, and Horus: "the vertical should thus be likened to the male, the base to the female, and the hypotenuse to their offspring; and one should similarly view Osiris as the origin, Isis as the receptive element, and Horus as the perfected achievement."[147] Perhaps Plutarch makes the association between Plato and Egypt because the Timaeus is dedicated to Athene, who, at the beginning of the dialogue, is identified with Neith, the foundress of the city of Sais in the Nile Delta (Tim.,21).[148]

According to Herodotus, geometry originated in Egypt during the reign of Sesostris (Ramses II), who levied taxes on rectangular parcels of land; when the Nile swept away part of the land, a decrease in taxes was requested, and the pharaoh's surveyors invented geometry to authenticate such claims.[149] Aristotle attributes the origin of mathematics not to necessity, however, but to the leisure enjoyed by the Egyptian priests who invented it.[150] A third version of the Egyptian origin of geometry is given in the Phaedrus (274), when Socrates says that Thoth (Stephen Dedalus' old guide, Portrait,225) "was the inventor of many arts, such as arithmetic and calculation and geometry and astronomy and draughts and dice, but his great discovery was the use of letters";[151] a few lines later occurs the famous reply of Thamus to Thoth that letters will make men forgetful.

When Joyce declares A.L.P. "eternal geomater" (296.31-297.01) and "Gran Geamatron" (257.04-.05), he means to say that she is the Great Mother of geometry and the earth; according to Skeat, the word mother and its cognates in the Indo-European languages are derived from the root MA, which means "to measure."[152] Joyce's characterization of A.L.P. as the mother of geometry repeats the account of Herodotus. The mud banks of the Nile where geometry was invented are mentioned in the instructions Dolph gives Kev concerning the construction of the Diagram: "First mull a mugfull of mud, son" (286.31); "mud" is also "mother" and "Mut," the Egyptian goddess, who is mentioned a few lines later: "sknow royol road to Puddlin, take your mut for a first beginning, big to bog, back to bach. Anny liffle mud which cometh out of Mam will doob, I guess." (287.04-.08)[153] The phrase "royol road to Puddlin," as we have seen in Chapter Three, recalls Euclid's statement, as reported by Proclus, that there is no royal road to geometry.

The words "Anny liffle mud" (287.07) mean the mud beside the river Liffey, which is A.L.P. The Nile River in Finnegans Wake is feminine,[154] like all rivers, and there is evidence that A.L.P., the Liffey, and the Nile are equated. For instance, in the phrase "Alpyssinia, wooving nihilnulls" (318.32), "Alpyssinia" contains A.L.P.'s name and Abyssinia, a country near the source of the Nile.[155] When A.L.P. speaks through Yawn, she is the Nile, since she describes herself as "in my nil ensemble" (493.05) and "nihil nuder under the clothing moon" (493.19).[156] The most convincing identification of the Liffey with the Nile is in this parody of The Book of the Dead: "I have abwaited me in a water of

Elin and I have placed my reeds intectis before the Registower of the perception of tribute in the hall of the city of Analbe" (364.20-.22); "Elin" is "Nile" in reverse, and "Analbe" is "Eblana," Ptolemy's name for Dublin.[157] In the Holograph Workbooks, Joyce brings the Nile and the Liffey into close proximity in this note: "Upper Nile meets [?] Lower Nile/ Lower [?] Nile meets [?] the Sky/ If Liffey had/ turned back?"[158]

Joyce's Nile-Liffey analogy is part of a wider system of correspondences between Ireland and Egypt. "Healiopolis" (24.18), for instance, is both the Egyptian city of the sun, Heliopolis, and Dublin, the city of T. M. Healy.[159] A passage in Sir Edward Sullivan's Introduction to The Book of Kells suggests that early Irish ornament is connected with that of Egypt and the East. According to Sullivan, the illustrations to a book on Egypt by C. Knight are proof that "the serpentine bands of the Irish ornaments" had already appeared "in the oldest Egyptian and Ethiopian manuscripts and with a similarity of colour and combination truly astonishing."[160] More recent scholarship has confirmed Sullivan's judgement.[161] The so-called Osiris pose occurs several times in The Book of Kells, and twice in Sullivan's truncated edition.[162] This pose is based on the traditional attitude of Osiris with crossed arms, holding flail and crook-sceptre, and acting as judge of the dead.[163] It has been suggested that a connection existed between Irish monasteries and the retreats of Egyptian hermits.[164] Joyce's portrait of St. Kevin (604.27-606.12) owes something to Yeats (compare "an enysled lakelet yslanding," 605.20, and "honeybeehivehut," 605.24, with "The Lake Isle of Innisfree"), and it may be that Kevin is something of an Egyptian by reason of this association, because Yeats once wrote: "the hermit Ribh in

'Supernatural Songs' is an imaginary critic of St. Patrick. His Christianity, come perhaps from Egypt like much early Irish Christianity, echoes pre-Christian thought."[165]

A.L.P. and the river: the circle of life

If geometry is devised on the banks of a river, and if the geometry in Finnegans Wake is sexual, then the river must be connected with A.L.P.'s sexual organs; Thomas Inman reminds us that the letter delta stands for the female organ, the door, and the outlet of a river.[166] It is on some such grounds that Clive Hart links the mouth of the river in Finnegans Wake with A.L.P.'s vagina.[167] This is precisely what Joyce means when he gives us a sample of a tourist promotion for Dublin in the words "If you would be delited with fresh water, the famous river, called of Ptolemy the Libnia Labia, runneth fast by" (540.06-.08), and when he refers to the "rivulverblott" (538.31). In Joyce's cosmos, "Woman will water the wild world over" (526.20-.21).

In Celtic mythology, the Mother is associated with the river, and in the Celtic languages, river names are feminine. According to Charles Bowen, "the position of the Mór-rígain in the glen, straddling a river with one foot on each bank, suggests that the river is to be envisioned as emanating from between her legs." The river is conceived to be the fertile womb, the amniotic fluid, and the water of life. An episode in "The Death of Derbforgaill" makes a direct connection between copious urination and sexuality.[168] The Diagram in Finnegans Wake is A.L.P.'s womb. Possibly, in light of Bowen's remarks, the central printed text of II.2 is meant to represent the river flowing from her womb, the Diagram, while the marginal comments made by Shem and Shaun are the two banks of the river, as are the two washerwomen who become tree and stone, Shem and Shaun, in *FW*,I.8. The urination-sexuality motif in Celtic mythology may be relevant in *Finnegans Wake*, for urine is one of A,L.P.'s notable characteristics.[169]

The holy rivers of Mesopotamia were thought to flow from the womb of the Great Mother; Joyce calls A.L.P. "old mother Mesopotomac" (559.35). In the old Babylonian language, *pû* means both "river" and "vagina."[170] When Joyce has Issy, the young A.L.P., say "Leg me pull. Pu! Come big to Iran. Poo! What are you nudging for?" (144.18-.19), he uses the word *pû* and names the plain east of the region where the word originated, "Iran"; there is also a sexual context to confirm the Babylonian reading. The word "pu" occurs twice more in association with Issy (459.03, 533.03) and a further time in "Pu Nuseht" (593.23); in close association with the last are the mother and her Mother Pot, in "Defmut" (593.21) and "coddlepot" (593.23).

Like A.L.P. herself, the river is associated with powers transcending sexuality and generation. In the *Timaeus* (75), it is said that "the river of speech, which flows out of a man and ministers to the intelligence, is the fairest and noblest of all streams."[171] Plato's metaphor relating speech and the river becomes an identity in India, where Sarasvatī Vāc, goddess of the river, is the guardian of writers, poets, intellectuals, and priests.[172] Joyce renews this symbolism in a paean to A.L.P. the river of speech: "we list, as she bibs us, by the waters of babalong." (103.10-.11) As we have seen, one aspect of the vessel of the goddess is that it also is connected with inspiration and poetry.

As the river, A.L.P. gives H.C.E. life; at the expense of her own life, she carries away with her the refuse and death of dear, dirty

Dublin at the end of the book: "Dear. And we go on to Dirtdump." (615.12) At the very beginning of his career, in "The Holy Office" (1904), Joyce, proud of the name "Katharsis-Purgative," writes:

> But all these men of whom I speak
> Make me the sewer of their clique.
> That they may dream their dreamy dreams
> I carry off their filthy streams
> For I can do those things for them
> Through which I lost my diadem,
> Those things for which Grandmother Church
> Left me severely in the lurch.
> Thus I relieve their timid arses
> Perform my office of Katharsis. (_CW_,151)

That the dream of _Finnegans Wake_ may go on, A.L.P. performs a similar purificatory service.

A.L.P. is immediately succeeded by Issy when she dies, and since the two are one, as the older and younger aspects of one personality,[173] it is difficult to say that there is ever a hiatus in the female principle of life. Erich Neumann shows that the Great Mother is both mother and daughter. The unity of Demeter and Kore is the principle mystery of Eleusis; the daughter succeeds the mother without interruption, in a chain of constant regeneration.[174] In _Finnegans Wake_, there is a possible reference to the Eleusinian mysteries in "her misstery . . . elusive" (166.36-167.01).

The continuity of succession between A.L.P. and Issy suggests an unbroken circular motion; the river flows into the ocean at the end of the book, evaporates into the clouds, and falls back onto the earth and into the river, initiating another pattern of rise and fall. As A.L.P. says in her final speech:

> Yes, you're changing, sonhusband, and you're turning, I can feel you, for a daughterwife from the hills again. Imlamaya. And she is coming. Swimming in my hindmoist. Diveltaking on me tail. Just a whisk brisk sly spry spink spank sprint of a thing theresomere, saultering. Saltarella come to her own. I pity

> your oldself I was used to. Now a younger's there. Try not to part! Be happy, dear ones! May I be wrong! For she'll be sweet for you as I was sweet when I came down out of me mother. My great blue bedroom, the air so quiet, scarce a cloud. In peace and silence. I could have stayed up there for always only. It's something fails us. First we feel. Then we fall. And let her rain now if she likes. (627.01-.12)

The endless natural cycle of water is Joyce's metaphor of unending life, and in Finnegans Wake it guarantees the rebirth of H.C.E.[175]

Circle and triangle: the reconstruction of H.C.E.

Finnegans Wake is filled with references to circles and wheels. Among these, the "Wheel of Fortune" (405.24) is what the Middle Ages sometimes called the Wheel of Mother Nature, upon which human beings rose and fell in fortune. In a typical mediaeval illustration, the Wheel is supported by the Earth Goddess, and at its top three-headed Time is enthroned.[176] The human figures which rise and fall around the Wheel are comparable to "larrons o'toolers clittering up and tombles a'buckets clottering down" (5.03-.04) the tower of H.C.E. in the fifth paragraph of Finnegans Wake (4.18-5.04), which, as we have seen, defines H.C.E. as the architect and freemason. It can be concluded that the rise and fall of H.C.E. and his tower is dependent upon A.L.P.'s Wheel of Fortune.

There is a series of connecting passages in Finnegans Wake which allows us to link the tower to the Diagram. It is suggested that the phrase "larrons o'toolers clittering up and tombles a'buckets clottering down" has wider implications when A.L.P. later is found "recoopering her cartwheel chapot (ahat! -- and we now know what thimbles a baquets on lallance a talls mean)" (59.05-.07). That is, the tower upon which Lawrence O'Toole (Shaun) and Thomas à Becket (Shem) rise and fall is also A.L.P.'s hat. But this hat is in turn identified with the rhombus in the

Diagram in a passage in which "B" and "C" are Burrus and Caseous, avatars of Lawrence O'Toole and Thomas à Becket on the tower: "The hatboxes which composed Rhomba, lady Trabezond (Marge in her excelsis), also comprised the climactogram up which B and C may fondly be imagined ascending and are suggestive of gentlemen's spring modes." (165.21-.25; Joyce's emphasis) It can be concluded that the Diagram is the means whereby H.C.E. and his erection are reconstructed; the final reference to clothing is appropriate, because, as we see in a moment, clothing is another metaphor for H.C.E.'s rebirth. Behind the entire process is the Wheel of Fortune.

H.C.E. is connected to the wheel by his initials in "the whole wheel of his ecunemical conciliabulum" (496.10). The following long passage is the definitive description of the reconstruction of H.C.E. by A.L.P., "the ancient legacy of the past," and her wheel:

> Our wholemole millwheeling vicociclometer . . . autokinatonetically preprovided with a clappercoupling smeltingworks exprogressive process, (for the farmer, his son and their homely codes, known as eggburst, eggblend, eggburial and hatch-as-hatch can) receives through a portal vein the dialytically separated elements of precedent decomposition for the verypetpurpose of subsequent recombination so that the heroticisms, catastrophes and eccentricities transmitted by the ancient legacy of the past, type by tope, letter from litter, word at ward . . . in our mutter nation, all, anastomosically assimilated and preteridentified paraidiotically, in fact, the sameold gamebold adomic structure of our Finnius the old One, as highly charged with electrons as hophazards can effective it, may be there for you, Cockalooralooraloomenos, when cup, platter and pot come piping hot, as sure as herself pits hen to paper and there's scribings scrawled on eggs. (614.27-615.10)

H.C.E., whose initials are hidden throughout this passage, is the egg-ego which is broken like Humpty Dumpty; through the offices of A.L.P. and her instruments - the wheel ("vicociclometer"), the liver ("portal vein"), the Letter and letters, atomic physics, and memory - H.C.E.-Humpty-etym-atom-Adam is put back together again, "Before all the King's

Hoarsers with all the Queen's Mum" (219.15-.16). The wheel is a "vicociclometer" because it operates according to the principles of Giambattista Vico: "The Vico road goes round and round to meet where terms begin." (452.21-.22)

The resurrection of H.C.E. in the preceding passage clearly takes the form of a trinity, "the farmer, his son and their homely codes" (614.31-.32). This trinity or triangle is also constructed in the Burrus-Caseous episode; while the two sons are busily contending for the favours of Marge-Issy, Antonius-H.C.E. enters and wins her. Through alchemical transformation,[177] H.C.E., Shaun, and Shem are united into one, the so-called "Antonius-Burrus-Caseous grouptriad" (167.04), which is said to be analogous to a "hyperchemical economantarchy" (167.06; note H.C.E.'s initials). The A.B.C. "grouptriad" is the upper triangle in the Diagram, which is normally labelled ABC in a geometry textbook (as in Casey's illustration for Euclid's First Proposition; see Figure 4, above). The Burrus-Caseous episode shows that when Shaun and Shem rise to the upper point of the triangle (we "pursue Burrus and Caseous for a rung or two up their isocelating biangle," 165.12-.13), H.C.E. is resurrected as the triangle, and that when they fall, he dies.

This triangle is meant to be the masculine Holy Trinity of Christianity, which Joyce pillories mercilessly throughout the book: "For the sake of the farbung and of the scent and of the holiodrops. Amems" (235.04-.05); "In the name of the former and of the latter and of their holocaust. Allmen" (419.09-.10); "I am yam . . . over at the house of Eddy's Christy, meaning Dodgfather, Dodgson and Coo" (481.35-482.01); "style, stink and stigmataphoron are of one sum in the same person" (606.27-.28); "the farmer, his son and their homely codes" (614.31-.32).

It is quite plain that the Three Persons of the Trinity are H.C.E., Shaun, and Shem: "*Three in one, one and three./ Shem and Shaun and the shame that sunders em*." (526.13-.14; Joyce's emphasis) The three are united in "the triptych vision" (486.32). Direct evidence that the triangle which is constructed in A.L.P.'s Diagram is both H.C.E. and the Holy Trinity is given in yet another parody of the Trinity, which occurs during the directions for constructing the Diagram as Euclid's First Proposition: "Concoct an equoangular trillitter. On the name of the tizzer and off the tongs and off the mythametical tripods." (286.21-.24)

The Great Mother is said to have brought forth twins, and thus, she governs all opposites, life and death, death and rebirth.[178] As the Great Mother, A.L.P. controls the opposites Shem and Shaun.[179] The Prankquean episode, in which she switches their places, is evidence of her power over the opposites; the twins similarly switch margins in II.2, precisely on the Diagram page (293). The word "jumeantry" in "*The aliments of jumeantry*" (286.L4; Joyce's emphasis) is based on "geometry" and Fr. *jumeau* ("twin"); through her geometry, A.L.P. controls and unites the twins, in order to resurrect H.C.E. When A.L.P. signs herself "Your wife. Amn. Anm. Amm. Ann" (495.33), she is varying her name according to the two consonants *m* and *n*, which differentiate She*m* and Shau*n*, because she contains both of them (as does the word *man*). When Jaun is delivering his parting advice to the girls, he describes their chastity as "that vestalite emerald of the first importance . . . which you treasure up so closely where extremes meet" (440.32-.35); that is, the virgin womb *is* the coincidence of opposites, like the Diagram.

A description of the travels of the Letter (420.17-421.14) begins with the statement that Shaun is the child of H.C.E., Shem of A.L.P.:

"Letter, carried of Shaun, son of Hek, written of Shem, brother of Shaun, uttered for Alp, mother of Shem, for Hek, father of Shaun." (420.17-.19) When Shaun and Shem are united, they are acting as the agents of H.C.E. and A.L.P., the male and female principles, and a *coincidentia oppositorum* is celebrated. In Christianity, the Word is made Flesh and descends to Earth, but in *Finnegans Wake*, the Flesh (A.L.P.) is made Word (the Letter) - "*Homo Made Ink*" (342.23; Joyce's emphasis) - and the Word is returned to heaven.

As Rebecca, A.L.P. advances the fortunes of Shem-Jacob over Shaun-Esau.[180] Her favouritism has an ulterior motive, the attainment of equality for women with men ("when all us romance catholeens shall have ones for all amanseprated. And the world is maidfree," 239.20-.22), as can be seen in this passage:

> Mind your Grimmfather! Think of your Ma! . . . She swore on croststyx nyne wyndabouts she's be level with all the snags of them yet. Par the Vulnerable Virgin's Mary del Dame! So she said to herself she'd frame a plan to fake a shine, the mischiefmaker, the like of it you niever heard. What plan? . . . Well, she bergened a zakbag, a shammy mailsack, with the lend of a loan of the light of his lampion, off one of her swapsons, Shaun the Post, and then she went and consulted her chapboucqs, old Mot Moore, Casey's Euclid and the Fashion Display and made herself tidal to join in the mascarete. (206.02-.14)

The word "swapsons" recalls the switching of the twins in the Prankquean episode. Shaun the Post is the son with the light, but A.L.P. is going to "fake a shine," and this fake is Shem the sham ("when is a man not a man? . . . when he is a . . . Sham," 170.05-.24). Shem does not, however, have H.C.E.'s penis, being his mother's son; in the signs which Joyce used to indicate the characters, H.C.E. is ᗰ, while Shem is [.[181] Like Isis, A.L.P. has to forge the penis of her dead husband, and she uses her "zakbag" or vessel to concoct it; in another place, Shem is the "alshemist" (185.35) who "potched in an athanor" (184.18), which is the alchemical furnace in which a new man is produced. In the passage FW, 206.02-.14, A.L.P. takes the light to consult her books. The most important of these for the present purposes is "Casey's Euclid," for it contains the First Proposition, that is, the Diagram in Finnegans Wake, by which she will "fake a shine," or resurrect H.C.E. Of the other two books, "old Mot Moore" is Old Moore's Almanack and the works of Thomas Moore (that is, the calendar and the poetry required to write the Letter), and "the Fashion Display" assists her in clothing H.C.E.[182]

Clothing and the rebirth of H.C.E.: the pattern of seven

Clothing metaphors will be familiar to readers of Swift's A Tale of a Tub and Carlyle's Sartor Resartus, to which Joyce alludes in Finnegans Wake; Swift especially is of importance for Joyce.[183] A Tale of a Tub figures in the passage in which H.C.E.'s head is renewed in a vessel: "one yeastyday he sternely struxk his tete in a tub for to watsch the future of his fates" (4.21-.22); according to Atherton, the work by Swift which appears most often in Finnegans Wake is his tale of Peter, Jack, and Martin.[184] The clothing metaphor also appears in Swift's other works. In Gulliver's Travels ("gullible's travels," 173.03), as Sheila Watson reminds us, "the tailors make Gulliver a mathematical suit which effects no change before his pathos because it fails to conform in any way to the contours of his body."[185] In The Drapier's Letters ("The Crazier Letters," 104.14), Swift expresses his opinion that "Eleven Men well armed will certainly subdue one Single Man in his Shirt," and this opinion is echoed in both Ulysses and Finnegans Wake.[186]

Joyce names Sartor Resartus as "shutter reshottus" (352.25) in connection with the Russian General, and again in a passage that links clothing imagery with the fall and rise of H.C.E.-Humpty Dumpty: "that mortar scene so cwympty dwympty what a dustydust it razed arboriginally but, luck's leap to the lad at the top of the ladder, so sartor's risorted why the sinner the badder!" (314.15-.18; see also 278.18-.21) Atherton points out that the paragraph on FW,109 is based on the following sentence from Sartor Resartus, Chapter X: "for our purpose the simple fact that such a Naked World is possible, nay actually exists (under the Clothed one) will be sufficient."[187]

The paragraph in question (FW,109) conflates the themes of clothing and literature by comparing the envelope of A.L.P.'s Letter to clothing, which is said to conceal "whatever passionpallid nudity or plaguepurple nakedness may happen to tuck itself under its flap" (109.10-.12). Joyce goes on to say that to concentrate on the contents of a Letter without examining the envelope is "just as hurtful to sound sense . . . as were some fellow in the act of perhaps getting an intro from another fellow turning out to be a friend in need of his, say, to a lady of the latter's acquaintance, engaged in performing the elaborative antecistral ceremony of upstheres, straightaway to run off and vision her plump and plain in her natural altogether, preferring to close his blinkhard's eyes to the ethiquethical fact that she was, after all, wearing for the space of the time being some definite articles of evolutionary clothing" (109.15-.23). The "evolutionary clothing" may simply be garments, or a metaphor for the evolved human body; the latter reading is supported by the phrase "wearing for the space of time," which suggests the creation of man the microcosm described in the Timaeus. It is woman who is specifically associated with clothing here, for the passage continues, "Who in his heart doubts either that the facts of feminine clothiering are there all the time or that the feminine fiction, stranger than the facts, is there also at the same time, only a little to the rere?" (109.30-.33). Again, clothing and literature ("feminine fiction") are equated. In reply to Frank Budgen's reminder in the thirties that Joyce thought a woman's body desirable when they first met, Joyce replied, "*Ma che!* . . . Perhaps I did. But now I don't care a damn about their bodies. I am only interested in their clothes."[188]

A complete exposition of the clothing theme in *Finnegans Wake* would be lengthy; it would, for instance, have to account for episodes such as the Norwegian Captain and Kersse the Tailor (309.01-332.09), in which the Captain asks, "Hwere can a ketch or hook alive a suit and sowterkins?" (311.22-.23). For the present purposes, only the role of A.L.P. as the seamstress "sewing a dream together, the tailor's daughter" (28.07) is important. *Sartor Resartus* teaches us to think of clothing in transcendental terms and of the body itself as the garment of the soul.[189] This metaphor is not original with Carlyle, for in Gnosticism, "tent" and "garment" are images of "a passing earthly form encasing the soul. . . . A garment is donned and doffed and changed, the earthly garment for that of light."[190] Compelling evidence that we are meant to think of the body of H.C.E. as clothing is found in the following reference to him: "the heavybuilt Abelbody in a butcherblue blouse from One Life One Suit (a men's wear store)." (63.15-.17) It is A.L.P. who dresses H.C.E. in his body-clothing; Erich Neumann has shown that clothing is connected to the feminine vessel character of the Great Mother.[191]

H.C.E.'s clothing is described again and again in *Finnegans Wake*, and in most cases, he has seven articles of apparel.[192] Seven is an important and complex number in Finnegans Wake and is also associated with Shem, the girls, sexuality and colour; in Chapter Two of the present work, we saw that colour, and sometimes seven colours (see 66.13-.15), is linked with Lucia's lettrines and with Joyce's method of composition. The first mention of H.C.E.'s clothing is in the Willingdone Museyroom, where Willingdone has seven articles of clothing, "his goldtin spurs and his ironed dux and his quarterbrass woodyshoes and his magnate's gharters and his bangkok's best and goliar's goloshes and his pulluponeasyan wartrews" (8.18-.21); the context is the "museyroom," in which Kate the janitrix has gathered together all the fragments of the old H.C.E. in preparation for the construction of the new. Similar lists of seven articles of clothing are at FW,35.08-.10, 52.23-.28, and 584.14-.18, and the characteristic is mentioned at 325.27-.29.

Proof that clothing is a metaphor for the body is again given just before the list of seven garments at FW,35.08-.10, when a reference is made to the date, "the anniversary . . . of his first assumption of his mirthday suit" (35.03-.04); the birthday suit is his naked body and the suit of clothes. The motif of seven is repeated in a passage that I have already discussed, namely, the one which describes the catasterism of the bodily parts of H.C.E.-Osiris: "Your heart is in the system of the Shewolf," and so on (26.11-.12). Seven comes in with the context, in "the priest of seven worms" (26.06-.07) and "Hep, hep, hurray there! Seven times thereto we salute you!" (26.09-.10). When A.L.P. says, "If they cut his nose on the stitcher they had their siven good reasons" (495.07-.08), she reveals that H.C.E. is stitched together and that the number seven is involved. In another place, when Shaun says "his seven senses" (424.30), although he is referring to Shem, we may take his words as further evidence of the relationship of seven to the body. Concerning the sentence "Under his seven wrothschields lies one, Lumproar" (10.35), Campbell and Robinson write: "the seven superimposed shields carry the suggestion, also, of the seven 'sheaths' (physical, astral, mental, buddhic, nirvānic, anupādakic, and ādic) which, according to the occultists, clothe the essence of the soul."[193] In view of the considerable body of references to Theosophy and Hinduism in *Finnegans Wake*, what they say may well be so; below, I consider the tantric concept of the seven *cakras* of the human body. In my consideration of Gnosticism in Appendix B, I relate the seven Gnostic archons and the sevenfold nature of the cosmos to H.C.E. It is thought that this Gnostic concept is linked to the Babylonian astrological system of seven planetary spheres; these seven macrocosmic spheres are reflected in the seven vestments of the soul in man, the microcosm.[194] In *Finnegans Wake*, H.C.E. is also connected to the stars and to seven, although not to the spheres, but to the seven stars of Ursa Major; his "number in arithmosophy is the stars of the plough" (134.14-.15).

Joyce also equates H.C.E.'s body-clothing with his house, castle, and city in terms of seven. H.C.E. retires "beneath the heptarchy of his towerettes" (77.18-.19). There are "seven doors of the dreamadoory in the house of the household of Hecech" (377.02-.03), and he has "seven parish churches" (525.17). He is also the city of Dublin itself, which has undergone "its hebdomodary metropoliarchialisation as sunblistered, moonplastered, gory, wheedling, joviale, litcherous and full" (181.07-.09); in this catalogue, the days of the week correspond to the seven astrological planets and their qualities.[195]

Another count of the days of the week relates them to the fall of

H.C.E.: "After suns and moons, dews and wettings, thunders and fires, comes sabotag." (409.28-.29) Finnegans Wake is itself a week of mourning, the period required for the new H.C.E. to be born: "the week of wakes is out and over; as a wick weak woking from ennemberable Ashias unto fierce force fuming, temtem tamtam, the Phoenician wakes." (608.30-.32) Like the higher critics of the literal interpretation of the week of Creation in Genesis, Joyce stretches this week of H.C.E. into historical periods of considerable length. His idea seems to be that H.C.E. falls in seven stages, and that after this, he is dead, and his successor arrives on the scene. H.C.E. is said to be "hiberniating after seven oak ages, fearsome where they were he had gone dump in the doomering" (316.15-.17). In the following passage, he is punished to the count of seven: "so three months for Gubbs Jeroboam, the frothwhiskered pest of the park, as per act one, section two, schedule three, clause four of the fifth of King Jark, this sentence to be carried out tomorrowmorn by Nolans Volans at six o'clock shark, and may the yeastwind and the hoppinghall malt mercy on his seven honeymeads and his hurlyburlygrowth, Amen, says the Clarke." (558.14-.20)

H.C.E.'s progressive degradation through seven stages receives a wider treatment in FW,589.20-590.03, which begins "Ofter the fall," counts backwards from seven through his misfortunes, and ends with "what remains of a heptark, leareyes and letterish, weeping worrybound on his bankrump." In the next few lines, Joyce tells us that this sevenfold fall is to be associated with the rainbow: "They know him, the covenanter, by rote at least, for a chameleon at last, in his true falseheaven colours from ultraviolent to subred tissues. That's his last tryon to march through the grand tryomphal arch. His reignbolt's shot. Never again!" (590.07-.10) Here, H.C.E. is identified with the Creator who falls in building the world in seven days and the "covenanter" who manifests the sevenfold rainbow as His sign of harmony; now, however, his reign is over. This passage, which ends Book III, must be read in conjunction with the second paragraph at the very beginning of the book (3.04-.14), which predicts the seven events that are to occur after the Fall at FW,3.14; here, too, the rainbow is involved: "rory end to the regginbrow was to be seen ringsome on the aquaface." (3.13-.14)

When "his roundhouse of seven orofaces" (356.05-.06), that is, H.C.E.'s body and house, is mentioned, it is followed directly by a passage that alludes to the Timaeus: "how comes ever a body in our taylorised world to selve out thishis, whither it gives a primeum nobilees for our notomise or naught, the farst wriggle from the ubivence, whereom is man, that old offender, nother man, wheile he is asame." (356.10-.14) At issue is the question of how a man comes by his body. A man is not a man when he is a "Sham" (Shem), as we know from FW, 170.24. But does "wheile he is asame" also mean "when he is Plato's Same"? It seems likely that man is not a man when he is only one of the two halves, Same or Other, principle of unity or principle of sevenfold diversity, Shaun or Shem.

Since Shem is identified with Plato's Other, it is to be expected that he will be associated with seven, and this is, indeed, the case. Shem occupies "in his seventh generation, a physical body" (98.08-.09). While H.C.E. is the "first of his sept" (173.24), Shem is "dirty seventh among thieves" (173.28). After his name he has a "litany of septuncial lettertrumpets" (179.22). As the Cad, he has too much to drink in seven pubs (63.21-.25).

I have shown in Chapter Three and elsewhere that as Berkeley in the Berkeley-Patrick dialogue (611.02-612.36), Shem exhibits his connection with seven by arguing that light is composed of seven colours ("Irismans ruinboon," 612.20), while Shaun-Patrick replies that light is white and unified, like "the sun in his halo cast" (612.30). Shem-Berkeley, the "numpa one puraduxed seer in seventh degree of wisdom" (611.19-.20), knows the "inside true inwardness of reality, the Ding hvad in idself id est" (611.21), and this inner reality is composed of the six colours which an object retains, rather than the one it reflects (611.17-.24). He is also demonstrating his qualifications as an ollave or master poet, who had to attain to the "seven degrees of wisdom" by undergoing a twelve-year training; the ollave was the only person other than the queen who was allowed six colours in his garments.[196] Shem-Berkeley wears a "heptachromatic sevenhued septicoloured roranyellgreenlindigan mantle finish" (611.06-.07), one grade higher than the ollave, while Patrick is clothed in the plain robes of the "greysfriaryfamily" (611.09). Shaun-Patrick wins the argument and is overtly the successor-son-sun to H.C.E., but nevertheless, light continues to be composed of seven colours, and Shem-Berkeley continues to influence Shaun from the inside after the two unite to form H.C.E.[197]

This analysis is corroborated by the fact that Shaun-Kevin, reborn when he meditates on "the primal sacrament of baptism or the regeneration of all man by affusion of water" (606.10-.12), moves in a landscape suffused with the number seven, as I have shown in Chapter Two. H.C.E. himself is the prism which splits light into the seven colours, for he is "like a heptagon crystal emprisoms trues and fauss for us" (127.03-.04). What this suggests is that the division of light into the rainbow colours is the fall of H.C.E.; Isaac Newton discovered the sevenfold nature of light as well as the gravity by which man falls ("thought he weighed a new ton when there felled his first lapapple," 126.16-.17). Shem-Berkeley argues for the sevenfold nature of light, and he is therefore associated with the fall of H.C.E. The unification of the seven colours into white light is the resurrection of H.C.E. and the rising of the sun-son, Shaun-Patrick. However, both sons are necessary to compose the new H.C.E. In Chapter Two, I proposed that the Diagram is also a rainbow that reconciles opposites, leading to the final reconciliation in FW,IV. In the passage "shall the vectorious readyeyes of evertwo circumflicksrent searclhers never film in the elipsities of their gyribouts those fickers which are returnally reprodictive of themselves" (298.14-.18), as I have shown in Chapter Three, Joyce compares the two circles of the Diagram to the two eyes that are Shaun and Shem, Patrick and Berkeley, Same and Other, and wonders if they will ever be reconciled and see true reality.

Another character is associated with seven, and that is Issy. In a passage I have considered in connection with the freemasonic ceremony of "passing the veils," the wish is made that "she seventip toe her chrysming, that she spin blue to scarlad till her temple's veil" (562.09-.10); besides the two masonic colours, "blue to scarlad," because of "seventip," implies the span of the rainbow. H.C.E. is said to have seven wives or to have relations with seven girls several times (see 106.31, 126.19-.20, 215.15-.17, 379.14, 494.27-.29, 572.35-573.01). When Issy is linked with seven, the theme of the sexual fall immediately becomes apparent, as in the following review of the Fall in Eden in seven items, preceded by the reversal (death) of H.C.E. and his initials:

"Eat early earthapples. Coax Cobra to chatters. Hail, Heva, we hear! This is the glider that gladdened the girl that list to the wind that lifted the leaves that folded the fruit that hung on the tree that grew in the garden Gough gave." (271.24-.29) This sevenfold series mimics the "House That Jack Built" motif that echoes through Finnegans Wake; it is H.C.E.'s house that is falling and being built. We are informed elsewhere that H.C.E. "had sevenal successivecoloured serebanmaids on the same big white drawingroam horthrug" (126.19-.20); the opposition between white and the seven colours suggests that H.C.E. was originally white and unified, but through the seven sexual colours of the girls, he falls. When the seven rainbow colours are associated with the girls, the reference is often to their undergarments, as in: "Wonder One's my cipher and Seven Sisters is my nighbrood. Radouga, Rab will ye na pick them in their pink of panties. You can colour up till you're prawn while I go squirt with any cockle." (248.34-249.01; see also 182.04-.11, 227.23-.25, 233.21-.27, 327.28-.30) When H.C.E. says, "let wellth were I our pantocreator would theirs be tights for the gods: in littleritt reddinghats" (551.07-.08), he is speaking of A.L.P. the "Pantokreator" (411.15), or Creatrix of all, who wears panties. Frank Budgen testifies that "throughout his life Joyce remained faithful to the underclothing of ladies of the Victorian era. . . . They were to Joyce feminine attributes of even greater value than the curves and volumes of the female body itself. . . . Indeed he used, in the Zürich period, to carry a miniature pair in his trousers pocket until one sad day, as he sadly informed me, he lost them."[198]

The "Fire Serpentine": tantrism in *'Finnegans Wake'*

In the Indian religious movement known as tantrism, the number seven figures prominently as the number of the *cakras* (Skt., "centres"; underlined words in this section, unless otherwise specified, are also Sanskrit). In *Finnegans Wake*, Joyce refers directly to these mystical body centres, though not in their usual ascending order: "*Force Centres of the Fire Serpentine: heart, throat, navel, spleen, sacral, fontanella, intertemporal eye.*" (303.L1; Joyce's emphasis) The "*Force Centres*" are the *cakras*, which are situated vertically along the spinal column; the "*Fire Serpentine*" is the *kuṇḍalinī* force, personified as the goddess Śakti, which travels from the base of the spine to the crown of the head, awakening each *cakra* in turn. This passage is a marginal comment in II.2, and the seven *cakras* are to be matched up with the names of seven Irish writers in the main text: "Tip! This is Steal, this is Barke, this is Starn, this is Swhipt, this is Wiles, this is Pshaw, this is Doubbllinnbbayyates." (303.05-.08)[199] Issy's footnote to this sentence is "When the dander rattles how the peacocks prance!" (303.F2); she refers to the rising of the serpent ("the dander rattles") through the spine, where it awakens the *cakras*, each of which has a characteristic colour ("the peacocks prance"). A few lines after the list of the seven Irish writers occurs the word "Upanishadem" (303.13); although the Upanisads were written some centuries, perhaps a millennium, before the major texts of tantrism,[200] Joyce mentions these important religious and philosophical works to provide an Indian context.

The considerable role of Indian mythology, religion, and languages in *Finnegans Wake* has yet to be explicated satisfactorily; the authors of *A Skeleton Key to 'Finnegans Wake'* explain several references within their running commentary, with no extended analysis; B. P. Misra has translated some of the Sanskrit.[201] Joyce must have come to much of his knowledge of India through his early (and continuing) interest in Theosophy, and Clive Hart, working upon this assumption, has advanced our understanding of the role of theosophical and Hindu cycles and of the sacred *mantra OM*;[202] as we shall see, Joyce's version of the *cakras* is theosophical rather than purely Indian. The question of Joyce's knowledge of Hinduism was too much for even Atherton,[203] and although I have made some progress in this vein, I, too, must bow to the pressures of limited space and leave a full exposition of the role of India to future investigators; what follows is an extended explication of tantrism alone.

Joyce refers to the word *tantra* at *FW*,189.05, 486.07, 490.24 (?), and 571.07, as well as in *Ulysses*, where two *cakras* are also named (301; see also 416). Tantrism is a movement that has had a profound influence upon all Indian religions - Hinduism, Buddhism, Jainism, and others - from the sixth century onwards.[204] The *cakra* systems of Hinduism and Buddhism differ significantly; Joyce uses a theosophical version of the Hindu system, and for this reason, I shall restrict my comments to Hindu tantrism.[205]

According to Hinduism, there are four ages or *yugas* (*satya*, *tretā*, *dvāpara*, and *kali*) into which the *kalpa*, or day of Brahmā (4,320,000,000 years), is divided. Joyce refers to these cycles many times, and to the fact that we are said at present to be in the *kali-yuga* (598.30-.33).[206] The human race degenerates as it passes through each *yuga*, and the *kali-yuga*, the age of the most degenerate humans, is marked by "viciousness, weakness, disease, and the general decline of all that is good."[207] Each age is said to have a characteristic Scripture which suits the hu[illegible] of the time; the Tantras, sometimes called the fifth Veda, are the Scriptures of the *kali-yuga*, the present degraded age. This concept that history devolves is amenable to Joyce and to the principles of his mentor Vico, and so is the eschatological cycle; the day of Brahmā ends and "a night of dissolution (*pralaya*) of equal duration follows, the Lord reposing in *yoga-nidrā* (*yoga* sleep in *pralaya*) on the Serpent Shesha, the Endless One, till day break, when the universe is created anew and the next *kalpa* follows."[208]

One of the basic principles of tantrism, in accordance with the requirements of the age, is that one triumphs over life not by an ascetic denial of a nature which is considered to be evil (as in Jainism, Sāñkya, and Yoga),[209] but by embracing nature. According to tantrism, "yoga (the yoking of empirical consciousness to transcendental consciousness) and bhoga ('enjoyment,' the experience of life's joy and suffering) are the same."[210] When one has the right consciousness, an act that is ordinarily detrimental, such as sexual intercourse or flesh-eating, becomes the vehicle of realization. For this, tantrism has been strongly censured. Properly understood, however, the idea is that the god or the goddess enters the body of the believer and that therefore the body itself is sacred. Sex in tantrism, symbolic and physical, has an important role;[211] it is thought to aid in arousing the *kuṇḍalinī* serpent coiled at the base of the spine.[212] This ritual is meant especially for the *kali-yuga*.[213]

In tantrism, the Absolute is regarded as a union of Śiva and Śakti, male and female, consciousness and energy, static and dynamic, *nivṛtti* ("repose") and *pravṛtti* ("activity"). Joyce does not seem to refer directly to Śakti in *Finnegans Wake*; the name "Shiva" appears in an Indian context at *FW*,80.24. I believe that he is alluding to the Śiva-Śakti doctrine in "woman formed mobile or man made static" (309.21-.22). This doctrine summarizes the main situation in *Finnegans Wake*: H.C.E. is dead and static, and A.L.P. is alive and dynamic. The sexual polarity which *Finnegans Wake* has in common with tantrism is indicated in phrases like "*In Nowhere has yet the Whole World taken part of himself for his Wife*" (175.07-.08; Joyce's emphasis). Śiva and Śakti are thought to reside in the human body as well as in the macrocosm, the former in the topmost *cakra*, the *sahasrāra*, and the latter in the lowest *cakra*, the *mūlādhāra*. When the *kuṇḍalinī*, or Śakti, coiled around the *mūlādhāra*, is roused by worship, it ascends through the other *cakras* and unites with Śiva in the head. This union signifies transcendence.[214] The corresponding marriage in *Finnegans Wake* occurs, for example, in the union of Humperfeldt and Anunska (585.22-.23) and in passages like "hemale man unbracing to omniwomen" (581.18) and "Bigrob dignagging his lylyputtana" (583.09).

One of the instruments of meditation is the linear diagram known as the *yantra*. A common *yantra* in tantrism is the interpenetrating triangles, a symbol of the union of Śiva and Śakti. As in the typology of Solomon's Seal, the triangle with its apex up signifies the male principle, in the case of tantrism, Śiva; the triangle with its point down is the *yoni* and Śakti.[215] Joyce employs the symbolism of the triangles in an identical fashion, as we have seen; in his Diagram, the upper triangle is male, and the lower is female.

Although it admits the duality of the Godhead, tantrism places a particular emphasis on the female aspect, Śakti. She is the cosmic force which underlies all creation, including the gods themselves. In *maithuna* ("ritual intercourse"), the female partner becomes Śakti; her naked body ideally arouses mystical emotion. Śakti is dynamic and mobile; Śiva is immobile, and this immobility is the goal of the yogin who follows his example.[216] Joyce refers to the Śakti cult in *Ulysses*, in a passage that also mentions the mystical potencies of syllables (*vide infra*); in the "Circe" episode, Mananaan MacLir says: "(*With a voice of waves.*) Aum! Hek! Wal! Ak! Lub! Mor! Ma! White yoghin of the Gods. Occult pimander of Hermes Trismegistos. (*With a voice of whistling seawind.*) Punarjanam patsypunjaub! I won't have my leg pulled. It has been said by one: beware the left, the cult of Shakti. (*With a cry of stormbirds.*) Shakti, Shiva! Dark hidden Father! . . . Aum! Baum! Pyjaum! I am the light of the homestead, I am the dreamery creamery butter." (*U*,510; Joyce's emphasis)[217] The sacred *mantra OM* or *AUM* also appears in *Finnegans Wake* (*vide infra*). How curious it is that "Hek," the name of H.C.E. in *Finnegans Wake*, should appear in the list of sacred syllables in *Ulysses* (Virag repeats it at *U*,521); this seems to support my earlier contention that "Hek" in *Finnegans Wake* is Egyptian for "word of power." MacLir says "beware the left, the cult of Shakti"; "left-hand" tantrism (*vāmacārī*) is so-called because of its association with sexuality and the possibility that the devotee may become the slave of black magic and debauchery.[218] Is it more than coincidence that the principal reference to tantrism in *Finnegans Wake* (303.L1) occurs in the *left* margin?

It is quite apparent that Śakti is a type for A.L.P., who is active while H.C.E. sleeps.[219] Śakti is spoken of over and again as Devī, the Great Goddess.[220] When Joyce writes "A plainplanned liffeyism assemblements Eblania's conglomerate horde. By dim delty Deva" (614.24-.25), he is saying that H.C.E. is reconstructed by A.L.P., who is "dim delty Deva"; this phrase is "Dear dirty Dublin," but the last word is also Sanskrit for "God," although here we are justified in applying it to the female A.L.P., because of "delty," the delta which is her sign.

We have seen that the vessel is one of the instruments of A.L.P. as the Great Goddess. Śrī Rāmakrishna (1836-1886), a great Hindu saint and a devotee of tantrism and the Great Goddess, also thinks of Kālī, the Black Goddess, as possessing such a vessel:

> after the destruction of the universe, at the end of a great cycle, the Divine Mother garners the seeds for the next creation. She is like the elderly mistress of the house, who has a hotch-potch-pot in which she keeps different articles for the household use. (All laugh.) Oh, yes! Housewives have pots like that, where they keep sea-foam, blue pills, small bundles of seeds of cucumbers, pumpkin, and gourd, and so on. They take them out when they want them. In the same way, after the destruction of the universe, my Divine Mother, the Embodiment of Brahman, gathers together the seeds for the next creation. After the creation the Primal Power dwells in the universe itself. She brings forth this phenomenal world and then pervades it.[221]

In the same way, A.L.P.-Kālī puts all "spoiled goods . . . into her nabsack" (11.18-.19) or vessel of regeneration. The ruins of the old H.C.E. and the old universe are gathered together and preserved in order that the new H.C.E. and the new universe may spring to life. As the World Illusion, the Goddess is known as Mahāmāyā; she is the power which makes the entire cosmos appear.[222] Sir John Woodroffe (Arthur Avalon) writes: "the eternal rhythm of the Divine Breath is outwards from spirit to matter and inwards from matter to spirit. Devī as Māyā evolves the world. As Mahāmāyā She recalls it to Herself."[223] Joyce names this aspect of the Goddess A.L.P. as "mahamayability" (597.28).

The force of Śakti which lies coiled at the base of the spine like a serpent is known as kuṇḍalinī. This is a luminous vital energy, which has been called "more subtle than the fibre of the lotus, and luminous as lightning."[224] Through the use of various techniques, such as chanting the sacred syllables (*mantras*) and controlling the breath (*prāṇāyāma*), the "Serpent Power" is aroused and ascends a channel parallel to the spinal cord known as *suṣumṇā*; as it rises, it brings into activity each *cakra*, until it unites with Siva in the *sahasrāra*.[225] This *kuṇḍalinī* is the force which D. H. Lawrence refers to when he writes disparagingly of "the psychiatric quack who vehemently demonstrated the serpent of sex coiled round the root of all our actions."[226] As we shall see, Joyce uses this serpent in a more positive metaphor, connecting it with the creation of literature. He appears to be referring to *kuṇḍalinī* in "Kund" (201.33). As I noted above, Issy's footnote "When the dander rattles how the peacocks prance!" (303.F2) describes the rising of the serpent through the coloured *cakras*. Because of the context ("Tantris," 486.07), when the *T* which is placed on Yawn's lip is described as "this serpe with ramshead" (486.21), Joyce is probably invoking the *kuṇḍalinī*. The same may be true of "that strange exotic serpentine . . . which . . . seems to uncoil spirally . . . under pressure of the writer's hand" (121.20-.25), which is concerned with *The Book of Kells*, in the main. Again, because of the reference to colour in "dip the colours, pet, when he commit his certain questions vivaviz the secret empire of the snake" (587.21-.23), there may be a reference to the tantric serpent.

The purpose of *kuṇḍalinī* yoga is regeneration of the personality, and it is precisely such regeneration Joyce alludes to in "he changed his backbone at a citting" (603.23). According to Heinrich Zimmer, *citta* "denotes whatever is experienced or enacted through the mind," sense, thought, and will, the "mind-stuff" which is to cease in yoga.[227] Joyce puns the word *citta* with "sitting" in "citting" (603.23), since sitting is the characteristic posture of a "naked yogpriest" (601.01), who, by practising "*yogacoga*" (341.08; Joyce's emphasis), is able to arouse the serpent to rise in his "backbone" (602.23), or *suṣumṇā*, and so transform his consciousness. Joyce appears to be using the Sanskrit word *citta* again in "the world's a cell for citters to cit in" (12.02) and possibly in "citta" (98.29), because of the "words of power" (98.26) nearby, although as in "citta" (228.23), the principal reference at *FW*, 98.29 is to "city" (It., *città*).

I have used the accepted term "Serpent Power," after the title of Sir John Woodroffe's edition of the tantric text *The Serpent Power: Being the Ṣaṭ-Cakra-Nirūpaṇa and Pādukā-Pañcaka, Two Works on Laya-Yoga* (1918). However, the term Joyce employs for *kuṇḍalinī*, "*the Fire Serpentine*" (303.L1), suggests that he relied upon one of C. W. Leadbeater's books; indeed, according to Stanislaus Joyce, his brother did read Leadbeater and the other major theosophists in his youth.[228] In his *The Chakras: A Monograph* (1927), Leadbeater uses the term "serpent-fire" to translate *kuṇḍalinī*,[229] which is almost identical with Joyce's term. Woodroffe discusses Leadbeater's terminology in detail; on the first page of his own book, he states that "Serpent Power" is his translation of *Kuṇḍalinī-Śakti*.[230]

A second strong indication that Joyce read and used Leadbeater's work is the terminology he resorts to in naming the *cakras*. Joyce's list is "*heart, throat, navel, spleen, sacral, fontanella, intertemporal eye*" (303.L1). The splenic *cakra* appears in Leadbeater's theosophical system, but not in the pure Indian system, as described, for example, by Woodroffe. Of Leadbeater's system, Woodroffe writes, "nor, as stated, is the splenic centre included among the six Cakras which are dealt with here [in The Serpent Power]."[231] Leadbeater himself remarks that "the chakras mentioned in these Sanskrit books [The Serpent Power and others] are the same as those which we see today, except . . . they always substitute their Svādhishthāna centre for that at the spleen."[232]

Leadbeater's list of cakras, with their Sanskrit names (except for the spleen, which has no Sanskrit correspondence) and their locations, is as follows: Root or Basic - mūlādhāra - base of the spine; Spleen or Splenic - above the spleen; Navel or Umbilical - manipūra - navel; Heart or Cardiac - anāhata - above the heart; Throat or Laryngeal - vishuddha - front of the throat; Brow or Frontal - ājnā - between the eyebrows; Crown or Coronal - sahasrāra - top of the head.[233] It should be noted that while in the Indian system the sahasrāra is not in the same category as the six lower cakras and is conceived as being above the head, Leadbeater thinks of it as on top of the head.[234] Joyce uses the term "fontanella" for the sahasrāra, which seems to imply that he thinks it to be on top of the head, like Leadbeater, rather than above it, because the fontanelle is actually part of the head in Western physiology. However, Leadbeater does not use the word fontanelle. Of all the books on tantrism which I have examined, the only one that speaks of the fontanelle as the location of the sahasrāra is Manly Hall's Man, the Grand Symbol of the Mysteries: Essays in Occult Anatomy (1932); however, Hall adheres to the Indian system of the cakras and does not mention a splenic cakra.[235] It may be that Joyce simply remembered the fontanelle from his research on pregnancy for Ulysses and decided to make use of it again.[236] Because of the connections which the word has with the infant, one might want to speculate that in Finnegans Wake, Joyce is thinking of the cakras - and of the seven Irish writers who correspond to them - as layers which are built up in the embryonic H.C.E. This speculation is certainly in keeping with the connections I have noted between the number seven and H.C.E.'s body-clothing and with the theme of the reconstruction of H.C.E. in A.L.P.'s Mother Pot; as Śakti, A.L.P. reigns over the seven *cakras* and seven Irish writers. Another possible explanation of Joyce's "*fontanella*" is that he is thinking of the philosopher Fontenelle, who, among other things, thought that all human endeavour could profit from an application of the "geometric spirit."[237]

I do not intend describing the *cakras* in any detail; however, it will be useful to know certain basic facts. Leadbeater conceives the *cakras* to be "force-centres,"[238] but more generally, they are thought to be "wheels," "lotuses" (*padmas*), or "centres," situated along the spinal column, through which the vital force is distributed to the body. Each *cakra* is "associated with certain Sanskrit letters, has a certain number of petals (making fifty petals in all), has its own characteristic colour, geometrical figure, element, sense organ, vital breath, deity, female deity or demoness, animal, mystic seed syllable, and a particular reward for meditating on it."[239] The connection that is made between letters and colours is reminiscent of Rimbaud's "Les Voyelles," to which Joyce seems to allude at *FW*,267.17 and 318.31-.35.[240]

Joyce does not use the word *cakra*. As we know, he does refer to the "*Force Centres*," which is precisely Leadbeater's term for the *cakras*. Joyce appears to name the lowest *cakra*, *mūlādhāra*, as "the holy well of Mulhuddart" (206.18) and "mulde" (212.26). Both these words occur in the dialogue of the two washerwomen, and the washerwoman (*dombī*) plays an important role in tantric "orgies";[241] Joyce uses this Sanskrit word for "washerwoman" in "Death banes and the quick quoke. But life wends and the dombs spake" (595.01-.02); the original sentences upon which these two are based (193.29, 195.05) refer to Justius and Mercius and directly introduce the A.L.P. chapter (I.8), in which the two washerwomen ("dombs," 595.02) speak. I can find no traces in Finnegans Wake of the Sanskrit names of the other six cakras. However, the "roundhouse of seven orofaces" (356.05-.06), which describes H.C.E.'s body, may also be an oblique reference to the seven cakras. The cakra is also known as a lotus or padma; Joyce mentions "inner lotus" (492.02), "Blooming in the very lotust . . . When you're in the buckly shuit Rosensharonals near did for you" (620.02-.04), and "Padma, brighter and sweetster, this flower that bells, it is our hour or risings. Tickle, tickle. Lotus spray" (598.12-.14). It is possible that references to "seal" in Finnegans Wake include the meaning cakra (see 20.16-.17, 148.02-.03, 212.22-.23, 297.03, 349.20-.24, 357.12-.14, 545.16).

Each cakra is associated with a geometric figure, and this is one of the most important aspects of tantrism for our purposes, because Joyce is concerned with the Goddess who creates by means of geometry. Leadbeater writes that each cakra is associated with an element and that "these elements are represented by certain yantras or diagrams of a symbolic character."[242] The yantra is a device for evoking the Goddess, at the same time as it is identical with her body.[243] Heinrich Zimmer says that the yoni is the yantra of the Goddess.[244] As we have seen, the Diagram in Finnegans Wake is directly connected with A.L.P. the Great Mother, and it specifically represents her genital organs, as in tantrism.

Connected with the yantra is the mandala, which is visualized in the mind of the tantric adept; one may think of it as a more complicated *yantra*. According to Jung, *maṇḍalas* "have the meaning and function of a centre of the unconscious personality."[245] Zimmer's definition of *yantra* is along similar lines; he thinks of it as "an instrument designed to curb the psychic forces by concentrating them on a pattern, and in such a way that this pattern becomes reproduced by the worshipper's visualizing power. It is a machine to stimulate inner visualizations, meditations, and experiences."[246] It is my contention that the Diagram in *Finnegans Wake* should be understood in precisely this sense; more specifically, Joyce's Diagram is the instrument which evokes A.L.P.-Śakti, the Great Goddess of life and poetic inspiration. As we have seen, Joyce had been initiated into the imaginative powers of geometry by Nicholas of Cusa, Bruno, Vico, Yeats, and others; the Oriental system testifies to the universality of his undertaking. Apart from the parallel with the Diagram itself, the *yantra* and the *maṇḍala* may have exact structural analogies in *Finnegans Wake*. Because Joyce used the symbol ⊕ to indicate Question 9 of *FW*,I.6 (143.03-.28), Clive Hart suggests that the structure of the book is a quadripartite *maṇḍala*, with Book IV at its centre.[247]

The concept of the magical anatomy - that the parts of the body correspond to forces in the world and the cosmos, to the emotions, and so on - is found universally in human culture.[248] Tantrism has developed the idea to a high degree of sophistication. In one of its initiatory rituals, the devotee visualizes the *cakras* on their correct positions on the body, in association with the appropriate number of petals, Sanskrit letters and *mantras*, element, colours, forms, and so forth.[249]

The system of anatomical homologues in tantrism reminds one of Joyce's plan for *Ulysses*, in which each episode has its appropriate place, hour, organ of the body, art, colour, symbol, technic, and

Homeric correspondence.[250] Joyce did not have to rely upon tantrism when he already knew Phineas Fletcher's The Purple Island and the doctrine of correspondences, but when he did discover tantrism, he must have been taken with the fullness of its vision, and it would have been confirmation of what he already knew. Phineas Fletcher and his doctrines reappear in Finnegans Wake; "the fletches . . . the isle we love in spice" (263.F2) gives his name and his principal work, The Purple Island, or The Isle of Man.[251] Joyce goes beyond the naive allegory of Fletcher; tantrism supplies him with a model for a much more archaic and magical perception of reality. A part of the body is not simply like its correspondence in tantrism; it is that correspondence. The vision invoked in Yawn by the Four in FW,486.06-.35 is tantric, among other things. Tantra is named as "Tantris" (486.07), and the Serpent Power is alluded to as "this serpe with ramshead" (486.21). The letter T is placed successively on Yawn's temple, lip, and heart, in upright, horizontal, and upside down positions, respectively. With each application of the letter, a different vision is engendered. This procedure is analogous to the identification in tantrism of a letter of the alphabet with each cakra; in one ceremony, each organ is cleansed with mantras and letters.[252] Of course, nothing in Finnegans Wake is univalent; temple, lip, and heart are the three areas touched in making the Sign of the Cross, and the T is the tau-cross. The references to freemasonry in "T square" and "templar" (486.15,.16) may owe something to Leadbeater's assertion that there is a connection between freemasonry and the force-centres of tantrism.[253] Like Yeats, who, under the tutelage of Mathers, induced visions in himself and others using geometrical symbols, Joyce believed that symbols had real effects upon the mind. In A

Portrait of the Artist as a Young Man, defending himself against Cranly's perplexity over his fear of the Christian symbols, Stephen Dedalus says that he dreads "the chemical action which would be set up in my soul by a false homage to a symbol behind which are massed twenty centuries of authority and veneration" (Portrait,243).

Joyce's knowledge and use of magic words is, I believe, profound, and this is a subject which requires an entire study of its own. Tantrism is only one source of the concept that syllables and words (mantras) have magical potencies. Mantra is already known in India in the Vedic period (ca.1500-1000 B.C.); tantrism's unique contribution is the understanding that through mantras one can attain pristine consciousness. The mantra, as in all magical views of language, derives its potency from its identity with the object it symbolizes. Through repetition of the magic syllable or word, the devotee induces a particular emotional state, evokes a god, or assimilates complete bodies of knowledge, since the mantra can be the essence of a treatise; in much the same way, Joyce writes of deriving the whole from the part, as in "ex ungue Leonem" (162.29; Joyce's emphasis).[254] According to Mircea Eliade,

> the entire cosmos, with all its gods, planes, and modes of being, is manifested in a certain number of mantras: the universe is sonorous, just as it is chromatic, formal, substantial, etc. A mantra is a "symbol" in the archaic sense of the term - it is simultaneously the symbolized "reality" and the symbolizing "sign." There is an occult correspondence between the mantra's mystical letters and syllables . . . and the subtle organs of the human body on the one hand and, on the other, between those organs and the divine forces asleep or manifested in the cosmos. By working on the "symbol," one awakens all the forces that correspond to it, on all the levels of being.[255]

The greatest mantra is OM, or AUM, as it is sometimes spelled. The letters comprising the latter version are assigned the following correspondences in the Māndūkya Upanisad: "A the waking state, U the dream, M deep sleep, and the SILENCE, Turīya, 'The Fourth'; all four together comprise the totality of this manifestation of Ātman-Brahman as a syllable."[256] In tantrism, *OṂ* is identified with Śakti as sound, and she comprises within herself all the gods and goddesses.[257]

Joyce refers to the mystical syllable or *mantra* as "mantram" (553.32), and he intones the greatest *mantra* *OṂ* several times (78.10, 193.29-.30, 282.29, 371.01, 543.06, 578.03, 594.12, 607.22, and, possibly, 612.30). In his long discussion of *OṂ* in *Finnegans Wake*, Clive Hart compares the four levels of consciousness said to be subsumed in the sacred syllable to the quadripartite structure of *Finnegans Wake*.[258] One could add that, like the principle of leitmotiv which Joyce exploits structurally and thematically to such a great extent in *Finnegans Wake*, the *mantra* depends for its efficacy upon repetition.[259]

There is an ancient Indian practice, renewed by tantrism, known as *nyāsa*, which involves the "ritual projection" of gods into areas of the body: "the disciple 'projects' the divinities, at the same time touching various areas of his body; in other words, he homologizes his body with the tantric pantheon, in order to awaken the sacred forces asleep in the flesh itself."[260] In my opinion, Joyce commits himself to something similar to this ritual projection when he assigns the seven Irish writers to the seven *cakras* (303.05-.08,.L1). Since he is concerned with literature, the connection in tantrism between each *cakra* and a *mantra* is especially relevant. As we shall see, tantrism has further connections with language and poetry.

If we combine Leadbeater's list of the *cakras*, with their Sanskrit names and their locations, with Joyce's list of the *cakras* and the Irish writers, the result is: Root or Basic - *mūlādhāra* - base of the spine -

"*sacral*" - Wilde ("Wiles"); Spleen or Splenic - (-) - above the spleen - "*spleen*" - Swift ("Swhipt"); Navel or Umbilical - *manipūra* - navel - "*navel*" - Sterne ("Starn"); Heart or Cardiac - *anāhata* - above the heart - "*heart*" - Steele ("Steal"); Throat or Laryngeal - *vishuddha* - front of throat - "*throat*" - Burke ("Barke"); Brow or Frontal - *ājnā* - between the eyebrows - "*intertemporal eye*" - Yeats ("Doubbllinnbbayyates"); Crown or Coronal - *sahasrāra* - top of the head - "*fontanella*" - Shaw ("Pshaw"). The question of why Joyce matches each Irish writer with the *cakra* he does will have to go largely unanswered here, since it would involve a complete assessment of Joyce's opinion of each writer. A few suggestions can be offered. Wilde might be associated with the sacral *cakra* because of the sexual scandal which he engendered. Swift, of course, is perfect for the spleen. As far as I have been able to determine, the Swift-spleen correspondence is the only one of the seven that is repeated elsewhere in *Finnegans Wake*; four lines before the references to *mantra* and Swift's Yahoos in "mantram of truemen like yahoomen" (553.32-.33), spleen is mentioned in "to split the spleen of her maw" (553.28). Sterne as the navel has been the object of previous critical attention, with which I cannot agree.[261] Possibly, since it mentions Swift, Sterne, and "wheels" (*cakras*) in one phrase, "swifter as mercury he wheels right round starnly" (454.20-.21) refers to the tantric correspondences. The observation "went stonestepping with their bickerrstaffs on educated feet, plinkity plonk, across the sevenspan pont *dei colori*" (178.23-.24; Joyce's emphasis) may imply Steele or Swift, through "bickerrstaffs,"[262] while the reference to the rainbow may be to the seven coloured *cakras*. The equation of Burke with the throat can only be a tribute to his powers of persuasion. Yeats as the "*intertemporal eye*" makes sublime sense;

Leadbeater says that concentration on this centre endows "the power to perceive definitely the shape and nature of astral objects," as well as waking visions and clairvoyance.[263] There also appears to be some connection between Yeats's concept of the gyre and the "Spiral Path of the Serpent of Wisdom"; possibly this connection arose in Yeats's mind because the Golden Dawn made use of tantrism in some of its rituals.[264] Yeats's high ranking in the scale of the *cakras* may also be due to the fact that, unlike Joyce, he received the Nobel Prize ("Nobletts' surprize," 306.04). Shaw also won the Nobel, and he is awarded the highest place at the "*fontanella*," at which *cakra* transcendence and the union of Śiva and Śakti occurs. Shaw's success and fame may have something to do with this assessment, but so may his theory of the Life Force or any number of other Shavian concerns, such as vegetarianism, socialism, women's suffrage, or the world alphabet and language; or, Joyce may have read the black girl's question in Shaw's *The Adventures of the Black Girl in her Search for God* (1933) as to the whereabouts of "the root you spoke of . . . The square root of Myna's sex,"[265] which would be relevant to Joyce's theme of A.L.P.-Śakti's sexual geometry.

The precedent for matching writers to the *cakras* may possibly be in *A Portrait of the Artist as a Young Man*, in a scene in which certain spots in Dublin evoke certain passages from literature for Stephen Dedalus; the "rainladen trees of the avenue" suggest the female characters in Hauptmann, Fairview conjures up "the cloistral silverveined prose of Newman," and so on (*Portrait*,176). And in the "Scylla and Charybdis" episode of *Ulysses*, when Stephen prays, "Composition of place. Ignatius of Loyola, make haste to help me!" (*U*,188), he has taken the discipline one step further, interiorizing an imaginary landscape and populating it with his idiosyncratic version of characters from Shakespeare's life and works.

In *Finnegans Wake*, Joyce defines the great Irish literary tradition out of which he springs as an interior landscape of the body. With the exception of Steele, Joyce repeats the invocation of the seven *cakra* authors in "Blare no more ramsblares, oddmund barkes! And cease your fumings, kindalled bushies! And sherrigoldies yeassymgnays; your wildeshaweshowe moves swiftly sterneward! For here the holy language. Soons to come" (256.11-.14). The Irish tradition which has been forged by the authors named here is "the holy language," and this passage anticipates the identification of the seven writers with the *cakras* of an Indian religious system at *FW*,303, which is "Soons to come." Elsewhere, Joyce makes the connection between Ireland and India, in tropes like "The invision of Indelond" (626.28), but he is careful to balance his use of the Indian mystical tradition with material from Druidic lore. In the following, he refers to tantrism ("tantrist spellings"), but the primary level of reference is to the ancient Irish alphabet known as ogham,[266] in which each letter of the alphabet corresponded to a tree: "And how they cast their spells upon, the fronds that thereup float, the bookstaff branchings! The druggeted stems, the leaves incut on trees! Do you can their tantrist spellings? I can lese, skillmistress aiding. Elm, bay, this way, cull dare, take a message, tawny runes ilex sallow, meet me at the pine." (571.04-.09) Notice that it is a "skillmistress" (A.L.P.) who inspires the writer. That ogham is associated with the seven *cakra* authors is also apparent from a passage which describes H.C.E. as "hiberniating after seven oak ages" (316.15-.16); this is also further evidence that it is the energy of A.L.P.-Sakti rising through the spinal cord and inspiring the seven poets that brings H.C.E.-Śiva to life. H.C.E. is "sure, straight, slim, sturdy, serene, synthetical, swift" (596.32-.33); the mention of Swift and the list of seven words that all begin with the hissing *s* ("that strange exotic serpentine," 121.20-.21) suggest the serpent *kuṇḍalinī* rising through the seven *cakras*.

By endowing the seven Irish writers with the magical powers of the *cakras*, Joyce is saying that this is his tradition, in much the same way that Yeats did on several occasions. In "Blood and the Moon" (1928), Yeats names Goldsmith, Swift, Berkeley, and Burke as the Irishmen who have preceded him on the winding "ancestral stair" of his tower.[267] In an essay published in 1934, Yeats writes of the Four Bells or four tragic notes in Irish history; to each belongs a wave of poets. Shaw, Wilde, and Moore he calls "the most complete individualists in the history of literature," and he praises the "satiric genius" that informs the first "free discussion" in Irish literature in works like *Ulysses* and *The Playboy of the Western World*.[268] And in *A Vision*, Yeats assigns writers and other mortals to the twenty-eight phases of his wheel.[269]

We have seen that Shem is associated with the number seven in *Finnegans Wake*, and this leads one naturally to the surmise that Shem is in some fashion the aggregate of the seven *cakra* authors. Throughout the book, he assumes the personality of Irish writers. As Berkeley, he defends the sevenfold nature of light, and there are seven *cakras*, which are coloured. In the following passage, the Letter, which is H.C.E.'s body, is identified with the seven colours of the rainbow and of the *cakras*: "Will it ever be next morning the postal unionist's . . . strange fate . . . to hand in a huge chain envelope, written in seven divers stages of ink, from blanchessance to lavandaiette, every pothook and pancrook bespaking the wisherwife, superscribed and subpencilled by yours A Laughable Party, with afterwite, S.A.G., to Hyde and Cheek, Edenberry, Dubblenn, WC?" (66.10-.18) H.C.E. the Letter and unified light will resurrect the next morning through the offices of A.L.P.-Śakti and her intermediary Shem, who together compose the Letter.

The *mantra* plays an important role in tantric practice, as we have seen, and the letters of the alphabet themselves are endowed with sacral significance. Each of the fifty letters of the Sanskrit alphabet corresponds to a single petal of the six lower *cakras* considered as flowers; the *sahasrāra*, in a class by itself, is said to be possessed of one thousand additional letters.[270] The very form of the letter radiates power; each letter is said to be "the *yantra* of the . . . imperishable Brahman." As one would expect, the combinations of letters into *mantras* are potent in the same way, for *mantras* as well are thought to be manifestations of Brahman and of *kuṇḍalinī*. The vocal utterance is conceived in four stages, and these four stages correspond to the ascent of *kuṇḍalinī* through four *cakras*.[271] Like A.L.P., *kuṇḍalinī* is the inspiratrix of poetry and speech: "her sweet murmur is like the indistinct hum of swarms of love-mad bees. She produces melodious poetry and Bandha and all other compositions in prose and verse in sequence or otherwise in Saṁskṛta, Prākṛta and other languages."[272] *Bandha* is a literary genre in which the arrangement of the words on the page forms an image.[273]

According to Mircea Eliade, "in tantrism, the tendency toward a rediscovery of language to the end of a total revalorization of secular experience is shown especially by its employment of secret vocabularies."[274] Compare this revalorization to Stephen's dream of becoming "a priest of eternal imagination, transmuting the daily bread of experience into the radiant body of everliving life" (Portrait,221), and to the "secret vocabularies" of Finnegans Wake. Tantric texts often use a species of allegorical expression known as "intentional languages" in which erotic imagery symbolizes states of mind. Tantric poets employ highly convoluted codes, contemplation of which propels the devotee into the "paradoxical situation" (and this should be compared with Cusa's serio ludere): "the semantic polyvalence of words finally substitutes ambiguity for the usual system of reference inherent in every ordinary language. And this destruction of language contributes . . . toward 'breaking' the profane universe and replacing it by a universe of convertible and integrable planes."[275] Though Joyce may not be attempting to induce a mystical state in his readers (the point is arguable), it can with certainty be said that he is trying to project a "real" image of the unconscious mind as it dreams; he "breaks" the ordinary universe by distorting its language in puns, and the theoretical justification for his method is the researches of Freud and others into the actual workings of the dreaming mind.

In the following passage, Joyce acknowledges his indebtedness to an Indian literary form which, though not tantric, is nevertheless contemporary with the rise of tantrism at the height of its development (5th-12th centuries); a consideration of this connection will be a fitting conclusion to the discussion of Joyce and tantrism: "Artha kama dharma moksa. Ask Kavya for the kay. And so everybody heard their plaint and all listened to their plause. The letter! The litter! And the soother the bitther! Of eyebrow pencilled, by lipstipple penned." (93.22-.25) The first four words are the standard Sanskrit formula for the Four

Aims of life and can be translated as "material possessions," "pleasure and love," "religious and moral duties," and "redemption or spiritual release."[276] Influenced perhaps by what he had earlier said about this passage in *A Skeleton Key to 'Finnegans Wake'*, Joseph Campbell, in *The Masks of God*, recounts the tale of the temptation of Buddha by Mara, which illustrates the Four Aims of life and is written in the *kāvya* style.[277] It is possible that the four Sanskrit words represent the four books of *Finnegans Wake*, the Letter which Kavya-A.L.P. ("lipstipple," 93.25) writes. The second sentence in the passage under consideration echoes "For her passkey supply to the janitrix, the mistress Kathe" (8.08), which introduces the "museyroom" (A.L.P.-Śakti's Mother Pot) full of "litter" (the Letter); *kathā* ("Kathe") is Sanskrit for "narration" and is applied to all narrative stories.[278] The word *kāvya* ("Ask Kavya for the kay," 93.22-.23) is Sanskrit for "poem" and is the specific term applied to one of the two major categories of epic poem in Sanskrit. The first *Kāvya* is the *Rāmāyana*, and there are six other major epics in this category. The genre is characterized by an elevation of form over content, by an excessive fondness for artifice, embellishment, and clever conceits, and by the use of extremely long compounds.[279] In one of the six *Mahākāvyas*, there is a stanza which, if read in reverse, is the preceding stanza read frontwards.[280] It is such qualities that attracted Joyce to the genre and led him to name the "Kavya" (93.22), for these qualities are precisely those of his own *Mahākāvya*, *Finnegans Wake*.

The doctrines of tantrism are the ideal touchstone for *Finnegans Wake*. While the universe of tantrism is bisexual, it is the female element, as in Joyce's work, which is active in creating, sustaining, and destroying it. Like A.L.P. and the Great Goddess everywhere, Śakti possesses a magical cauldron with which she creates the world. The vehicles by which both A.L.P. and Śakti are evoked are geometric form and magic syllable and word. A.L.P.-Śakti is the source of all poetic wisdom and inspiration.

The poet and the Muse: Joyce and woman

No matter what one's attitude to the question of discrimination by sex, it must be recognized that the predominant symbolic model of mind in our civilization, until now, has been the marriage of the logical male consciousness and the imaginative female unconsciousness; let it be noticed that I have said "symbolic" model. It is essential for the poet who wishes to bring the imaginative faculties to their fullness to develop a relationship with the unconscious mind and its personification, the Great Mother. We have seen that the Goddess presides over the death and regeneration of personality and that her vessel, as the earth, underworld, coffin, or cauldron, is the instrument of regeneration; Erich Neumann identifies this instrument with "the all-embracing psychic reality, the womb of the night or of the unconscious."[281] However, the cauldron of regeneration is more than this; it is also the vessel of poetic inspiration, and poetry was originally magic.[282] In all cultures, woman is valued as the source of magical power, and further, as the sibyl, priestess, and seeress, and as the lady of "wisdom-bringing waters of the depths, of the murmuring springs and fountains, for the 'original utterance of seerdom is the language of water'."[283] The seeress is filled with an afflatus and speaks with the tongue of another world; she is the repository of magic, magical song, and poetry:

"she is the Muse, the source of the words that stream upward from the depths; and she is the inspiring anima of the poets."[284]

The idea that woman is the inspiratrix of poetry should not be confined to its more ancient manifestations. In Dante, for instance, love of a woman leads to spiritual development, and in Petrarch and Boccaccio there can be no poetic achievement without a woman.[285] Figures such as Queen Mab, Asia, and Urania inspire the Muse-poetry of Shelley,[286] while more recently, Robert Graves bases his grammar of poetic myth, The White Goddess, on the thesis that "the language of poetic myth anciently current in the Mediterranean and Northern Europe was a magical language bound up with popular religious ceremonies in honour of the Moon-goddess, or Muse, some of them dating from the Old Stone Age, and that this remains the language of true poetry."[287]

In Chapter Two of the present study, I argued that Lucia Joyce was Joyce's anima inspiratrix; the work he produced in collaboration with his daughter should be accounted, I believe, as another example of Muse poetry. Earlier in his career, while in Trieste, Joyce developed a passion for a young woman named Amalia Popper, and the way in which this passion is recorded in Giacomo Joyce is again suggestive of Muse poetry, invoking as it does the spirit of Dante: "So did she walk by Dante in simple pride and so, stainless of blood and violation, the daughter of Cenci, Beatrice, to her death." (GJ,11)[288]

However, the most important woman in Joyce's life was the A.L.P. to Lucia's Issy, his wife in all but name, Nora Barnacle, with whom he lived all his adult life (when Joyce's father first heard her name, he said, "she'll never leave him"[289]). According to Richard Ellmann, all Joyce's fictional women are basically one woman, who bears a striking resemblance to Nora.[290] However, Nora was not only his model, but also his inspiration; alone in Dublin, he writes to her: "guide me, my saint, my angel. Lead me forward. Everything that is noble and exalted and deep and true and moving in what I write comes, I believe, from you. O take me into your soul of souls and then I will become indeed the poet of my race."[291] And although there is some truth to the idea that Joyce formed Nora in his own image,[292] it is also true that Nora's two pregnancies were for Joyce an ineffable mystery and a metaphor for artistic creation. In his discussion of aesthetics with Lynch, Stephen speaks of "the phenomena of artistic conception, artistic gestation and artistic reproduction" (Portrait,209). Concerning Stephen's conclusion that the artist, like God, is refined out of existence (Portrait,215), Ellmann is of the opinion that "this creator is not male but female; Joyce goes on to borrow an image of Flaubert by calling him a 'god,' but he is really a goddess. Within this womb creatures come to life. No male intercession is necessary even; as Stephen says 'In the virgin womb of the imagination the word was made flesh.'" (Portrait,217) Ellmann continues by recording further instances of Joyce's interest in gestation as a metaphor of the unfolding of personality.[293]

Though one can agree partially with R. M. Adams when he opines that "the 'religion of women' of which Joyce developed so idiosyncratic a version does not seem to be subjected to ironic scrutiny,"[294] it must never be lost sight of that Joyce's attitude towards women is more complicated than mere adoration. He seems to have suffered from the characteristically Irish classification of women as either virgins or whores. Nora embodied for him both aspects; he writes her, "one moment I see you like a virgin or madonna the next moment I see you shameless, insolent, half naked and obscene!"[295] Would a man whose "religion of women" admitted no irony have replied to Budgen's use of the word "heart" in connection with a love affair that "the seat of the affections lies lower down, I think"?[296] The cynicism evident in an epigram he repeated, "woman is an animal that micturates once a day, defecates once a week, menstruates once a month, and parturates once a year,"[297] is sufficient to relieve Joyce of the charge of blindly idealizing women.

In 1905, Joyce wrote to Stanislaus that he knew very little about women and that "it is only Skeffington, and fellows like him, who think that woman is man's equal."[298] He must have learned a great deal about women in the years following, because his portrait of Molly Bloom prompted Carl Jung to remark, "I suppose the devil's grandmother knows so much about the real psychology of a woman, I didn't."[299] The probable source of Joyce's information about the psychology of women, Nora, who would have been unimpressed by one man's opinion of another man's knowledge of women, once said of her husband, "he knows nothing at all about women."[300]

Joyce developed the notion that the artist is impotent without the life-giving connection with a woman. According to Maurice Beebe, his life with Nora was a compromise that allowed Joyce to enjoy artistic freedom; one of his puppets, Mr. Duffy of "A Painful Case," isolates himself from women and life and fails as a writer.[301] Grace Eckley takes this analysis one step further and argues that none of Joyce's characters ever become true artists, remaining forever potential, forever returning to the creative potency of a woman.[302] In any event, failed or not, the poet-figure in Joyce is always associated with a woman: Mr. Duffy and Mrs. Sinico in "A Painful Case," Gabriel and Gretta Conroy in

"The Dead," Richard Rowan and Bertha in Exiles, and Stephen Dedalus and both his mother and the bird-girl in A Portrait of the Artist as a Young Man.[303] In Ulysses, Stephen broods over his dead mother, but a new mother and a powerful Muse, Molly Bloom, throws her shadow across his way; Stephen expands upon the gynaecological symbolism which he had conceived in the earlier novel and articulates artistic creativity as an analogue of the world-creating activity of the Goddess: "As we, or mother Dana, weave and unweave our bodies, Stephen said, from day to day, their molecules shuttled to and fro, so does the artist weave and unweave his image." (U,194)[304]

A dream Joyce had a year after the publication of Ulysses would appear to indicate that his mind was moving in the chthonic regions in which the archetype of the Great Mother reigns. He dreamt he saw Molly Bloom throw a coffin at Leopold, saying she had done with him, and when Joyce tried, in the dream, to remonstrate with her and to explain the "Penelope" episode to the woman who speaks it, she threw a snuffbox-coffin at her creator, saying, "and I have done with you, too, Mr. Joyce."[305] Molly's dream words must have made an impression upon Joyce, because he wrote a song of lament over her departure into the arms of other suitors (the readers of Ulysses); this song is alluded to at FW,43.18-.21.[306] Furthermore, four years later, in 1927, he wrote in a letter, "and I have done with you too, Mrs Delta";[307] he meant that he had completed a second draft of the A.L.P. chapter of Finnegans Wake, which he signified by a triangle or delta, but by echoing Molly Bloom's dream words of dismissal, he showed that Molly and A.L.P. were one continuous character in his mind and that the writing of the A.L.P. chapter was to some extent in reply to the dream of 1923.

To anyone at all familiar with the suggestions of Jung's analytical psychology, Joyce's dream and its echoes in his waking life portend the activation and independence of the Great Mother archetype in his unconscious mind. The widening interest in the woman-figure exhibited in his works is the natural complement of the inner movement of his mind; if it be objected that here I am arguing from the man to his works, then I can only repeat Stephen's defence of his biographical analysis of Shakespeare's works: "He found in the world without as actual what was in his world within as possible." (U,213) In Richard Ellmann's opinion, "as he exerted total control over his books, Joyce dreamed of agonizing self-abandonment to female power."[308] L. A. G. Strong makes a similar judgement in more forthright terms; using Jung's terminology, he sees Joyce in Finnegans Wake "paying tribute to the anima, the feminine principle in his own unconscious, and letting it take its rightful place in the book, that was for so long his inner life"; the result of this process, writes Strong, is the integration of the conscious and unconscious portions of the mind.[309]

The poet-woman pattern comes to its fullness for Joyce in the Shem-A.L.P. relationship of Finnegans Wake.[310] Earlier, I showed how the vessel which A.L.P. as the Great Mother possesses is the vessel of inspiration, and how inspiration and the writing of literature are equivalent to the reconstruction of the body of H.C.E. It is A.L.P. who inspires Shem to write the famous Letter: "Letter, carried of Shaun, son of Hek, written of Shem, brother of Shaun, uttered for Alp, mother of Shem, for Hek, father of Shaun." (420.17-.19) Again, as the "secretary bird" (369.25), A.L.P. "indiscriminatingly made belief mid authorsagastions from Schelm the Pelman to write somewords to Senders" (369.27-.28).

Yawn tells us that it is Shem "who is sender of the Hullo Eve Cenograph in prose and worse every Allso's Night. . . . midden Erse clare language" (488.23-.25); the words "Eve" and "midden" indicate the inspiring presence of A.L.P.

Joyce took an interest in Samuel Butler's The Authoress of the Odyssey (1897), which theorized that a woman wrote Homer's work;[311] perhaps this theory contributed to Joyce's portrait of A.L.P., who, as well as being Shem's inspiratrix, is herself a poetess. The Letter is "subpencilled by yours A Laughable Party" (66.16-.17). As Havvah-ban-Annah, A.L.P. is a "writress" (38.30). As a bird in the "Lead, kindly fowl" invocation (112.09-.27), she is the source of benevolent evolution, harmony, and divination, as well as the authoress of a new literature: "Biddy Doran looked at literature." (112.27) The very letters of the alphabet are female, as in "cunniform letters" (198.25), "mummyscrips" (156.05), and "her nubilee letters" (205.07), and language itself is described in feminine terms in "lie of her landuage" (327.20) and "amnest plein language" (333.27). The rainbow of the seven girls and of Shem-Berkeley combines into one white light, and this "flash becomes word" (267.16). A.L.P. is the "mother of the book" (50.12).

The Great Memory: Yeats, Joyce, and Plato

Memory, thought the Greeks, is the mother of the Muses.[312] When A.L.P. gathers fragments into her vessel, she is performing the task of preserving the collective human memory, and without that memory, poetry cannot exist; she is called "Meminerva" (61.01), a combination of "memory" and "Minerva," goddess of wisdom and the arts. The passage describing the "wholemole millwheeling vicociclometer" (614.27-615.10) defines the process by which opposites can be reunited, "so that the heroticisms, catastrophes and eccentricities transmitted by the ancient legacy of the past, type by tope, letter from litter, word at ward" (614.35-615.01) may resurrect as H.C.E. (present by his initials), through the agency of A.L.P., the collective memory or "*a*ncient *l*egacy of the *p*ast." The process of reintegration through memory in *Finnegans Wake* is a "vicociclometer," because Vico thought that the "ideal eternal history" of man could be reconstructed through an examination of etymology, language, and other human institutions: "the world of civil society has certainly been made by men, and . . . its principles are therefore to be found within the modifications of our own human mind." (*The New Science*,331)[313]

As with so much else, Yeats is an important source for Joyce's concept of the collective memory. Stimulated by visions from another world, Yeats posits the concept of an *anima mundi* which is real and active in human affairs and contains all human symbols; through literature, one can decipher this universal memory and the record of the human mind.[314] In the first edition of *A Vision* (1925) he writes that in supreme magic one must employ words and symbols that are now unknown in order to succeed, and then, "when sleep is interrupted by vision the seer goes back to remote times, and the seer amidst brilliant light discovers myths and symbols that can only be verified by prolonged research. He has escaped from the individual *Record* to that of the race."[315] Yeats had defined the *anima mundi* in forthright terms twenty-five years earlier; in "Magic" (1900), an essay important to an understanding of his mind and work, he affirms his belief in magic and its three basic doctrines:

> (1) That the borders of our mind are ever shifting, and that many minds can flow into one another, as it were, and create or reveal a single mind, a single energy.
> (2) That the borders of our memories are as shifting, and that our memories are a part of one great memory, the memory of Nature herself.
> (3) That this great mind and great memory can be evoked by symbols.[316]

Years later, Joyce repeated this definition almost word for word, in a manner that indicated that he had considered Yeats's concept deeply and given to it his assent. Frank Budgen was preparing his James Joyce and the Making of 'Ulysses' (1934), with some assistance from Joyce, who sent him a note which read as follows:

> Yeats's defence & definition of magic: a) The borders of our minds are always shifting tending to become part of the universal mind b) The borders of our memory also shift and form part of universal memory c) This universal mind & memory can be evoked by symbols
> It should be pointed out that Mr J. lived amidst all this (including Yeats) and his library was full of theosophicle [sic] works though he did not use any of the recognised symbols--using instead words trivial and quadrivial and local geographical allusions (Trivial meaning litterally [sic]--carrefour--where three roads meet).[317]

Budgen reproduces this note almost word for word in the final text of his book, adding to it the words, "the intention of magical evocation, however, remained the same."[318] Like Yeats, Joyce showed his interest in the great memory from an early age; in his essay "James Clarence Mangan" (1902) - and it is probable that Joyce's interest in Mangan was roused by Yeats[319] - Joyce writes: "In those vast courses which enfold us and in that great memory which is greater and more generous than our memory, no life, no moment of exaltation is ever lost." (CW,83)[320]

The concept of the great memory recurs in Joyce's writings. In the "Aeolus" episode, Stephen Dedalus thinks of the Akasic records of Theosophy, which, like Yeats's great memory, preserve everything that occurs in nature:[321] "Akasic records of all that ever anywhere wherever was." (U,143) Later, Joyce makes the following entry in the "Scylla and Charybdis" section of the so-called Large Notebook: "dream thoughts are wake thoughts of centuries ago: unconscious memory: great recurrence: race memorial: repressions: fixations."[322] The first eight words of this note have been crossed through in green by Joyce, which means that it contributed to Finnegans Wake. Joyce is reported as saying "that Finnegans Wake was 'about' Finn lying dying by the river Liffey with the history of Ireland and the world cycling through his mind."[323]

Harry Levin, while willing to allow that "H. C. Earwicker's subconscious mind is the historical consciousness of the human race," does not seem to believe himself when, later in the same book, he remarks: "these obiter dicta cannot be traced, with any show of plausibility, to the sodden brain of a snoring publican. No psychoanalyst could account for the encyclopedic sweep of Earwicker's fantasies or the acoustical properties of his dreamwork."[324] From the previous indisputable evidence of Joyce's continuing fascination with the theory of the collective memory, Levin's assessment goes against the facts. Joyce's very point is that every man is Everyman, that the part equals the whole, and that the entire history of the human race can be reconstructed from the mind of its humblest member, precisely because even that member contains within it the collective memory. When Arthur Power expressed his desire to become international, Joyce replied: "for myself, I always write about Dublin, because if I can get to the heart of Dublin I can get to the heart of all cities of the world. In the particular is contained the universal."[325]

Other critics take a more positive view of Joyce's relation to the collective memory than does Levin. L. A. G. Strong views Finnegans Wake as an exploration of Jung's collective unconscious, without committing Joyce to Jung's theories as such; to Strong, Joyce's motive is essentially religious, "to integrate and redeem the deepest levels of the human psyche." Furthermore, he writes, Joyce employed magical evocation in pursuit of this goal.[326] Atherton justifies Joyce's technique of generalizing from the particular to the universal by Jung's concept of the collective unconscious and by Freud's insight that the mind is composed of many layers;[327] Hart agrees that the Jungian unconscious informs the characters of Finnegans Wake.[328]

Joyce does, doubtless, refer to the psychoanalytic theories, despite his scorn for the "new Viennese school" (U,205), but since we know that he read Yeats on the great memory, why should we justify him by means of Jung and Freud when he had the living witness of a poet and a countryman to guide him? Marshall McLuhan's remarks on memory, related as they are to the pattern of death and rebirth, are much more evocative in regard to the idea of memory in Joyce. McLuhan thinks that the poet reconstructs the process of physiological perception; "a poem is a vivisection of the mind and sense in action, an anagenesis or retracing, begetting anagnorosis or recognition. This is the key to the theme of memory and history embodied in Anna Livia of the Wake. She runs forward but 'ana' is Greek for backwards, and spells the same both ways."[329]

In times when poetry is oral, the poet requires a prodigious memory, in order to incorporate, in Frye's words, "lists of kings and foreign tribes, myths and genealogies of gods, historical traditions, the proverbs of popular wisdom, taboos, lucky and unlucky days, charms, the deeds of the tribal heroes . . . The encyclopaedic knowledge in such poems is regarded sacramentally, as a human analogy of divine knowledge."[330] It is in this traditional responsibility of the poet to remember, I believe, that we can find the justification for those many lengthy lists in Joyce's works, which have puzzled those who must have everything justified.

It is said that Joyce regarded memory as the highest mental power;[331] how curious it is that so many of his characters are forgetful. Even Stephen Dedalus, whose memory for details is remarkable, forgets something he had meant to say in his discourse on Shakespeare and is plagued with the remorse of "Afterwit" (U,215). The hapless Bloom exerts mnemotechnic throughout the day (U,514, 526, 689, 710), but it seldom works, and when it does, what is remembered is trivial.[332] In Finnegans Wake, Shem is "oblious autamnesically" (251.04), although he has earlier exercised himself in "Examen of conscience . . . to the best of his memory schemado" (240.06-.07). Near the beginning of the book, Finnegan "struxk his tete in a tub for to watsch the future of his fates" (4.22). When the same tub is recalled at FW,272.18, Issy's footnote, "That's the lethemuse but it washes off" (272.F3), implies that the Memory (Mnemosyne) who is the mother of the Muses can also bestow forgetfulness, as if it were A.L.P. as the river Lethe who was flowing inside Finnegan's tub. One expects that everyone in Finnegans Wake will be amnesic, because it is all a dream, and dreams are characteristically the realm of oblivion. However, near the end of the dream, when Kevin-Shaun is reborn, it is with a new set of mental faculties, and he becomes "keeper of the door of meditation, memory extempore proposing and intellect formally considering" (606.08-.09; Joyce's emphasis); this nascent power is the token of rebirth.

A.L.P. does not suffer from amnesia, because she is the collective memory and because Finnegans Wake is the veil of illusion which she herself weaves, "the dream of woman the owneirist" (397.01-.02). No matter how forgetful everyone else in the book is, there is always a "Recorder at Thing of all Things" (536.31), A.L.P. Memory seems always to carry associations of sin for Joyce, as in the preceding quotation, and as in "the historic presents" which A.L.P. steals from "the past postprophetics so as to will make us all lordy heirs and ladymaidesses of a pretty nice kettle of fruit" (11.30-.32); that is, by plucking the forbidden fruit as Eve, she has made us heir to sin. However, where there is sin there is forgiveness and salvation; sin is the prelude to creation in Joyce, and to the reconstruction of the new Adam, as in FW, 614.27-615.10.

H.C.E. attests to the inspirational powers of A.L.P. when he says, "she skalded her mermeries on my Snorryson's Sagos" (551.04); as the collective memory ("mermeries"), A.L.P. inspires the poet ("skald"), such as Snorri Sturlason, author of The Prose Eddas,[333] while H.C.E. is snoring in sleep. More succinctly, the "museyroom" to which "Kathe" (Sanskrit kathā, "narration") has the key (8.08,.09) is the "room of the Muses"; the objects in the Museum are the contents of the vessel which is the collective memory, and Memory is the mother of the Muses.[334]

As Issy, A.L.P. says: "I will write down all your names in my gold pen and ink. Everyday, precious, while m'm'ry's leaves are falling deeply on my Jungfraud's Messongebook I will dream telepath posts dulcets on this isinglass stream (but don't tell him or I'll be the mort of him!) under the libans and the sickamours, the cyprissis and babilonias, where the frondoak rushes to the ask and the yewleaves too kisskiss themselves and 'twill carry on my hearz'waves my still waters reflections in words." (460.18-.26) In the first place, memory is a book, but since it is "Jungfraud's" book, it must be Jung's collective unconscious.[335] As memory falls from consciousness to be recorded in the book, it is again transmitted back to the dreamer, H.C.E., via telepathy and "the isinglass stream"; however "telepath posts" and "kisskiss" remind us of the Letter, which must therefore equal the collective unconscious, and since *Finnegans Wake* is itself the Letter, it must also be the collective unconscious. The admonition "don't tell him or I'll be the mort of him" implies both that the Letter contains the news of the old H.C.E.'s death and that woman is responsible for his life, which fact, if he knew it, would fatally wound his pride. The memory which falls on the "Messongebook" is "leaves," presumably those which fall from the seven trees under which Issy lies dreaming. Shem is the tree in *Finnegans Wake*, but since there are seven trees, we are asked to think of the passage "hiberniating after seven oak ages" (316.15-.16) and of the seven Irish writers connected with the *cakras* and with ogham; that is, poetry and the collective unconscious are directly associated. Issy's "still waters" reflect in "words," so as the collective unconscious, she inspires the poet, as well as receiving the falling leaves which indicate another Fall, writing the messages of the leaves in her book, and sending new messages once again to the conscious mind.

At one point, A.L.P. is called "Annanmeses" (452.34), that is, "anamnesis," which means recollection, especially of a previous life. The word also refers to Plato's theory of memory (ἀνάμνησις),[336] which is expounded in this speech by Butt: "Between me rassociations in the postleadeny past and me disconnections with aplompervious futules I've a boodle full of maimeries in me buzzim and medears runs sloze, bleime, as I now with platoonic leave recoil in . . . me misenary post for all them old boyars that's now boomaringing in waulholler, me alma marthyrs. I dring to them, bycorn spirits." (348.05-.11) The "maimeries" are those found in the "platoonic" theory,[337] but there is something more primitive here, for Butt's memory is visited by the spirits of the corn and of the dead of which Sir James Frazer writes.[338]

In both of the following examples from Plato, mathematics or geometry is employed to prove that knowledge and learning are recollection. In the Meno (82-86), through a skilful technique of asking the right questions, Socrates has Meno's untutored slave arrive at mathematical truths of which he had no previous inkling; from this, Socrates deduces that learning is recollection, and that the soul is immortal.[339] And in the Phaedo (73) (see U,215 and FW,628.08-.09), Cebes argues in a similar fashion that "if you put a question to a person in the right way, he will give a true answer of himself, but how could he do this unless there were knowledge and right reason in him? And this is most clearly shown when he is taken to a diagram or to anything of that sort."[340] The existence of the collective memory in Finnegans Wake is similarly shown most clearly when one contemplates the Diagram, which is the source of imagination and poetic inspiration. Richard Motycka has also observed that the Diagram, like that in the Meno, is "an epistemological device for bringing archetypal memories to the surface"; he argues that while Plato's object is to demonstrate immortality, Joyce's Dolph is "concerned with evoking an eidetic memory of original sin in his brother."[341] I am in agreement with his position, although it must be added that A.L.P. and the Diagram are the source of both the fall and the rise.

The emphasis in the present study has been upon the redemptive aspects of the Diagram.

In Plato's view, the recollection of the world of Ideas - of what we would call the collective memory or the collective unconscious - is most readily demonstrated by geometry and mathematics. In Finnegans Wake, the geometric Diagram is the magical symbol opening into the collective memory, which is identical to A.L.P., the "eternal geomater." Vico refines Plato's insight and suggests that geometry stimulates the mind to poetry. As "Gran Geamatron," A.L.P. is the inspiratrix of the poet Shem; he writes Finnegans Wake at her dictation, in the process resurrecting the new H.C.E. It is for Shem that the instruction "by memory inspired, turn wheel again to the whole of the wall" (69.05-.06) is meant; A.L.P. is the inspiring memory, and the wheel is Finnegans Wake itself.

EPILOGUE

A commentary is, in the words of Ezra Pound, "a piece of writing in which we expose and seek to excuse our ignorance of the subject. The less we know, the longer our explanations." This being so, the present study, along with the countless other millions of words which have been heaped over the corpse of poor Finnegan, could only succeed in further obscuring the location of his final resting place. The day of resurrection approaches in a painfully slow manner, while we who remain behind labour in preparing the way for that final epiphany.

Eight years after my first efforts at seeking the serpentine wisdom of Finnegans Wake, I find myself all the more entangled in its coils, and yet I remain convinced that the snake of language conceals a precious jewel within its brain. Finnegans Wake is the graveyard of intellectual pride; the monstrous convolutions of Joyce's erudition are paralysing. But despite Pound's scorn for the humble commentator, Finnegan's winding sheet is gradually being unravelled, thanks to a large and growing communion of Joycean scholars. My hope is that the present work will in its turn be of some value to future inquirers, both as a consolidation of past accomplishment and an encouragement to fresh insight.

Paracelsus thought that every poison was also a cure; in the same way, language is the touchstone of all human conflict and misunderstanding, as well as the promise of release from the nightmare of history. Joyce's dream was the pentecostal unity of human tongues, and Finnegans Wake is the incantation of the One, Holy, Catholic, and Apostolic Word; our illiteracy is the measure of our remoteness from that mystery.

APPENDIX A - NOTES ON THE TEXTS OF JOYCE'S WORKS

No satisfactory text of Finnegans Wake exists. In the present study, I have used what is presumably the most widely disseminated version, the Viking Compass Edition, published New York: The Viking Press, 1959; fifteenth printing, January 1974. I prefer this text to the one recommended by the James Joyce Quarterly (viz., New York: The Viking Press, and London, Faber & Faber, 1939), because the latter is not now widely available, and because it does not incorporate Joyce's own Corrections of Misprints in 'Finnegans Wake' (1945), which was only bound with the text in 1946 (see John J. Slocum and Herbert Cahoon, A Bibliography of James Joyce 1882-1941, pp.59-62, A47-48, and p.66, A53). The issue is further complicated by the fact that the Corrections of Misprints, the typescript of which Joyce probably never checked, is itself riddled with errors. According to Clive Hart, the new edition published in September 1975 by Faber & Faber (too late to be used in the present study) includes thirty-one new corrections and is the most accurate text ever published ("A New Edition of Finnegans Wake"); however, this text can be far from definitive, since it still must harbour the residue of the seven thousand errors said to exist in previous editions. Hart thinks that the true text of Finnegans Wake is the sewn, unbound copy of the first edition into which Joyce and Paul Léon inserted corrections ("The Hound and the Type-Bed: Further Notes on Finnegans Wake"); this document is now in the Wickser Collection, Lockwood Library, University of Buffalo, Buffalo, New York (MS.VI.H.4.a in Peter Spielberg, comp., James Joyce's Manuscripts and Letters at the University of Buffalo: A Catalogue, p.150).

Some time ago, James Blish announced that he would receive suggested corrections, which will eventually be published as an appendix in a future edition ("Announcement: A Wake Appendix," and "Work in Progress, A Wake Appendix"). For further discussion of the problem of the text of Finnegans Wake, see: Jack P. Dalton, "Advertisement for the Restoration," in Twelve and a Tilly: Essays on the Occasion of the 25th Anniversary of 'Finnegans Wake', ed. Dalton and Hart, "Finnegans Wake 549.11: 'horrible,'" "Habemus Dominationis," and "Hardest Crux" (all four deal with proposed emendations); Peter Du Sautoy, "The Published Text" (a representative of Faber & Faber argues [1967] that no further changes are required); Edmund L. Epstein, "Correspondence" (an answer to the second item by Dalton, above); Hart, "Editorial Note" and "Note"; Fred H. Higginson, "Notes on the Text of Finnegans Wake" (most errors are the fault of the typesetters) and "The Text of Finnegans Wake," in New Light on Joyce from the Dublin Symposium, ed. Fritz Senn (on emendations); Senn and Hart, "Editorial Comment" (on the Corrections of Misprints); Philip B. Sullivan, "Mr. Dalton, St. Kevin, and the Latin Language" (an answer to the third item by Dalton, above).

Following the recommendation of the James Joyce Quarterly, I have used throughout the present study the edition of Ulysses published in 1961 by Random House. Dalton notes that this text is not, as claimed, a new edition at all, but merely a reprint of the 1960 English resetting; in his estimation, there are some 7700 errors in this version, 1700 of which are due to reprinting. Dalton makes clear the difficulties of working from such a text when he writes that "the ineffable nature of this edition should be clear to you from a noted corruption on the second page: the preposition 'to' was left out (after 'over') so that Buck

Mulligan, from the top of the Martello tower, 'went over the parapet, laughing to himself' - a surrealistic smashup for a major character who reappears in the next sentence, lathering up for a shave" ("The Text of Ulysses," in New Light on Joyce, ed. Senn, p.101). Presumably, he is speaking of the 1960 edition, because the error has been corrected in the 1961 edition. In 1973, Norman Silverstein announced an eleven-member committee formed to produce a corrected text ("Committee on the Text of Ulysses"). For further discussion, see: Anthony DeCurtis, "An Error in Ulysses"; Miles L. Hanley et al., Word Index to James Joyce's 'Ulysses', pp.xiii-xix; Hart, James Joyce's 'Ulysses', pp.95-98; Higginson, "The Text of Finnegans Wake," p.120; Brendan O Hehir, "An Unnoticed Textual Crux in Ulysses"; Silverstein, "Toward a Corrected Text of Ulysses: Errata of the 1934 Random House and 1960 Reset Bodley Head Editions of the 'Circe' Episode"; John W. Van Voorhis and Francis C. Bloodgood, "Ulysses: Another Pirated Edition?"

I have used the New York: The Viking Press, 1968 edition of A Portrait of the Artist as a Young Man, one of two texts recommended by the James Joyce Quarterly. The editor of this edition, Chester G. Anderson, has written a "Note on the Text," p.254. See also: his "The Text of James Joyce's PAYM"; and Spielberg, "James Joyce's Errata for American Editions of A Portrait of the Artist," in Joyce's 'Portrait': Criticisms and Critiques, ed. Thomas E. Connolly.

For discussion of the text of Dubliners, see Robert Scholes, "A Note on the Text," in Dubliners, ed. Scholes and Richard Ellmann (New York: The Viking Press, 1967), pp.5-6.

For discussion of the text of Stephen Hero, see: Slocum and Cahoon, "Foreword to the New Edition," in their edition of Stephen Hero (New

York: New Directions, 1963), pp. 3-6, and "Five More Pages of James Joyce's Stephen Hero," in A James Joyce Miscellany, 2nd Series, ed. Marvin Magalaner; and Philip Waldron, "A Note on the Text of Stephen Hero."

Scholes supplies different versions of "The Holy Office" (1904) and "Gas from a Burner" (1912) ("The Broadsides of James Joyce," in A James Joyce Miscellany, 3rd Series, ed. Magalaner). William H. Quillian reproduces two groups of autograph notes for Joyce's twelve lectures on Hamlet, now lost ("Shakespeare in Trieste: Joyce's 1912 Hamlet Lectures").

APPENDIX B - GNOSTICISM IN 'FINNEGANS WAKE'

As I pointed out in Chapter Four, Joyce's attribution of original sin to the Creator is Gnostic. In Finnegans Wake, the imperfect creation and the gnosis or illumination which is both the attribute of the unknown God and the goal of the Gnostic are named in Shaun's marginal comment "GNOSIS OF PRECREATE DETERMINATION. AGNOSIS OF POSTCREATE DETERMINISM" (262.R2). T. S. Eliot's lines "Between the conception/ And the creation/ Between the emotion/ And the response/ Falls the Shadow" ("The Hollow Men," V) are a convenient gloss; in both, an artifact has leapt from the forehead of its omniscient creator only half-armed.[1] Other references in Finnegans Wake to gnosis and Gnosticism include: "gnoses" (157.25), "gnawstick" (170.11), "gnose's glow" (182.04-.05), "dognosed" (254.01), "If I gnows me gneesgnobs" (274.F2), and "gnosegates" (612.24).

One of the more prominent Gnostics, Marcion, is named as "Marcon" (192.01).[2] Marcion posited two Gods, the false God of Law and justice, who created the cosmos, and the unknown God of the Gospel and mercy, who is utterly transcendent.[3] The dispute between Justius and Mercius in FW, 187-95 may owe something to this distinction, although there are other possible sources, which I mentioned in Chapter Two, such as the Cabbala and the Renaissance tradition concerning justice and mercy.

The Albigenses were a neo-Manichaean sect of the twelfth and thirteenth centuries related to the Catharists; they adhered to such typical Gnostic doctrines as the duality of the first principles and the equation of this earth with hell.[4] They appear in Finnegans Wake as "Albiogenselman" (173.13), "allbigenesis" (240.13), and "allbegeneses"

(350.31); by making his neologisms carry the overtone "genesis," Joyce seems to be giving credence to the Gnostic doctrine of the sinful creation. The Albigensian heresy was in the air during Joyce's lifetime. The re-emergence of Gnosticism in late nineteenth century France among artists like Fabre des Essarts was one cause of Pope Leo XIII's apostolic letter against Albigensianism.[5] In Joyce's day, the widespread literary and scholarly interest in Provençal poetry generated speculation that the troubadours were linked to the Cathar heresy and the Albigensian crusade.[6]

When Joyce writes of "the secret empire of the snake" (587.22-.23) and of the "ophis workship" (289.07),[7] he may be referring to the Gnostic sect of the Ophites, who thought of the serpent which tempted Adam and Eve as the agent of deliverance from the wicked tyranny of the Archons.[8] Unlike the Author of the book of Genesis, Joyce prefers Cain-Shem the vegetarian (171.03) to Abel-Shaun the butcher (172.05-.10),[9] and this is a preference he shares with the Ophites; Hippolytus gives the following as an Ophitic text, which makes clear their distinction between Cain and Abel: "this general Serpent is also the wise Word of Eve. This is the mystery of Eden: this is the river that flows out of Eden. This is also the mark that was set on Cain, whose sacrifice the god of this world did not accept whereas he accepted the bloody sacrifice of Abel: for the lord of this world delights in blood. This Serpent is he who appeared in the latter days in human form at the time of Herod."[10]

In the Mandaean variant of Gnosticism, the word Mana is the name of the divine spirit, although its original meaning was "vessel" or "jar." Joyce combines this word and its original meaning in "manajar"

(305.F2). Furthermore, "manajar" is in a footnote to the phrase "Ovocation of maiding waters" (305.28-.29); the image of "living waters" is a common Mandaean metaphor.[11] The Gnostic rituals often included the use of nonsense words, which were sometimes palindromic, such as Ablanathanalba;[12] Joyce intones this mysterious word as "Ebblannah than" (138.23). The many appearances of T and the tau-cross in Finnegans Wake may be partly due to the Gnostic cross, a T, although the primary reference in such cases is to the Tunc page of The Book of Kells (which may itself, however, have Gnostic elements).

The central Gnostic doctrine is dualism. God is said to be the totally transcendent opposite of the cosmos, which He did not create. The cosmos is rather the work of the wicked Archons, who prevent gnosis of the unknown God by fostering the delusion that is the cosmos. Joyce reveals a taste for dualism as early as Stephen Hero, in which he describes Stephen's interest in a theory that is as much Gnostic as it is Platonic: "He toyed also with a theory of dualism which would symbolise the twin eternities of spirit and nature in the twin eternities of male and female and even thought of explaining the audacities of his verse as symbolical allusions." (SH,210) In 1925, Joyce writes to Miss Weaver, in one of those letters that attempts to explain Finnegans Wake, that Bruno's philosophy is "a kind of dualism - every power in nature must evolve an opposite in order to realise itself and opposition brings reunion etc etc. Tristan on his first visit to Ireland turned his name inside out."[13] The principle of the reconciliation of opposites which Joyce learned from Bruno and Nicholas of Cusa does not obtain in Gnosticism. Much has been written about the coincidence of opposites in Finnegans Wake (see Chapter Two of the present work), but can it be shown that the reconciliations that indisputably do occur (else H.C.E. can never be reborn) are more than temporary? Harry Levin, for one, answers in the negative: "the Brunonian doctrine which commends itself to Joyce is an aggressive reconciliation of the antitheses of the schoolmen. Since form and matter are father and mother, the Adam and Eve of Bruno's pantheistic universe, all created things are the unruly offspring of the demiurge of intellect and the matrix of necessity. Finnegans Wake spins a giddy commentary on this doctrine. Ulysses had avowed that the conflicting interests of artist and citizen were irreconcilable. The later work exaggerates this avowal by suspiciously regarding all men as potential antagonists, and by ruthlessly dichotomizing its dramatis personae."[14] An unpublished doctoral dissertation by D. G. Gullette, which I have been unable to examine, explores the unreconciled opposites in Joyce's works.[15] The reader will perhaps be struck with the notion that Gnostic dualism is in conflict with what I said at the conclusion of Chapter Two concerning the reconciliation of opposites necessary to reconstruct H.C.E. I do not pretend to have the final solution. Both doctrines appear in Joyce. Perhaps one can see the matter in this way: the dualism described by Gnosticism is a characteristic of a fallen world seen by a fallen observer; in the rare moments of transcendence, the opposites disappear, and H.C.E. is resurrected.

Duality in Gnosticism finds expression in the widespread imagery of light and darkness and of life and death, especially in the Iranian and Manichaean variants.[16] Shaun and Shem, as Chuff and Glugg in FW,II.2, are the principles of light and dark. Admittedly their confrontation is couched in terms of the war in heaven between Michael and Satan (222-223), but this myth itself is derived from Iranian dualism. Observers of Joyce have often remarked a Manichaean stratum in his work. Frank Budgen wonders, "is there a Manichaean leaning in Joyce's 'spirit and nature' duality?"[17] Stuart Gilbert writes that "in the Circe episode, like Milton heroizing Satan, he gave expression to a Manichean strain that is still more evident in Finnegans Wake."[18] To Arland Ussher, Joyce is "the complete and utter metaphysical dualist, or comic Manichean."[19] Clive Hart thinks that Shem is "evidently a Manichean co-eternal Satan."[20] Fritz Senn has discovered traces of the heresy in "Inam" (237.26), "Demani" (237.30), and the dualistic struggle between Glugg and Chuff. He also claims to have found a parallel between the Manichaean classes of the catechumeni (auditores, or "hearers") and the electi (perfect believers) on the one hand, and, on the other, the progress of the twenty-nine girls praising Glugg, who are merely humble auditores at FW,237.12, but "bright elects" at FW,239.28.[21] In light of Senn's remarks, it is of some interest, in reference to the doctrine of original sin, that St. Augustine rose to the level of auditor in a Manichaean sect, attracted by its cosmology and its dualism, before he strongly repudiated the heresy;[22] as Joyce knew from his experiences with the Jesuits and with Ireland, one can never completely escape the habits formed in youth.

According to Gnosticism, the cosmos is a sevenfold prison created by the seven Archons. This pattern of seven may contribute to the heptads in Finnegans Wake, which I examined in Chapter Five. The Archons are led by the hebdomad or demiurge, so-called specifically in his role as creator of the cosmos.[23] Discussing the composition of Finnegans Wake in 1938, Joyce remarked, "c'est bien ainsi que doit pratiquer le démiurge pour fabrique notre beau monde? . . . Peut-être, en somme, qu'il réfléchit moins que nous."[24] In Finnegans Wake, he refers to a "dime-dime urge" (149.21), or "demiurge," in a dualistic context; as in his comment on the demiurge's power of reflection, Joyce is also thinking of the demiurge in Plato's Timaeus. As a builder, H.C.E. resembles an Archon, and this resemblance is strengthened by the fact that the pattern of sevens in Finnegans Wake is connected principally with him. On the other hand, H.C.E. often withdraws to himself; as Jarl van Hoother, he has "his burnt head high up in his lamphouse" (21.10). This absence suggests some relationship with the alien, absolutely transcendent God of Gnosticism,[25] but one must be careful in making such an identification, since H.C.E. does speak often enough.[26]

Man is in exile in this world, say both the Gnostic and Stephen Dedalus. To be in the world is also to be in a temporary "dwelling" or "house." The world is an "inn" in which man "lodges"; "to keep the inn" is understood to mean "to be in the world or in the body."[27] In Finnegans Wake, of course, much of the drama transpires at H.C.E.'s inn.[28]

The Gnostics also conceive the world to be an admixture of the principles of light and darkness. Part of the primordial Light has fallen away and has been trapped in the darkness of the world; as Jonas writes, "an original unity has been split up and given over to plurality: the splinters are the sparks dispersed throughout the creation."[29] The body and soul of man have been created by the Archons as a prison for the human spirit or "pneuma" or "spark," which is "a portion of the divine substance from beyond which has fallen into the world."[30] The reversal of this scattering of the light is the ingathering and re-establishment of the primal unity; this process involves both gnosis and salvation for the individual and the unification of the universal Light.[31]

As both Humpty Dumpty and Osiris, H.C.E. is shattered into pieces in a fashion strongly suggestive of the Gnostic dispersal. A.L.P. as Isis "Before all the King's Hoarsers with all the Queen's Mum" (219.15-.16) puts Humpty Dumpty back together again; she performs a task equivalent to the Gnostic ingathering. The universe of *Finnegans Wake* is the underworld and the dream and as such can be compared to the darkness of the Gnostic dispersal, while the victory of light in *FW*, IV corresponds to the final restoration of Light.

The fallen condition in Gnosticism is called "sleep" and "drunkenness";[32] *Finnegans Wake* is one of the grand poems in celebration of sleep, and alcohol is Finnegan's downfall (6.07-.10,.26-.27). The Gnostic process of salvation is described as a call from a Redeemer. Often, this call is an awakening; one document begins, "I am the call of awakening from sleep in the Aeon of the night." According to Hans Jonas, this call epitomizes Gnosticism.[33] Book IV of *Finnegans Wake* opens with "Calling all downs. Calling all downs to dayne. Array! Surrection!" (593.02-.03) and announces the arrival of morning after a long night of sleep and dreams: "Into the wikeawades warld we are passing." (608.34) In Gnosticism, the light to which one wakes is a metaphor of the good and the divine. Joyce expresses a similar idea when one of his characters prays that the children may "read in the book of the opening of the mind to light and err not in the darkness which is the afterthought of thy nomatter" (258.31-.33), as well as when he has H.C.E. speak of "my otherchurch's inher light" (546.21).

In the Iranian Gnostic "Hymn of the Pearl," part of the apocryphal *Acts of the Apostle Thomas*, the messenger falls into sleep and intoxication, but is revived through the call of a letter. Ode XXIII of the apocryphal *Odes of Solomon* sings: "his plan of salvation became like unto a letter,/ his will came down from on high." The Mandaeans spoke of the escape of the soul from the body as "a well-sealed letter dispatched out of the world whose secret nobody knew . . . the soul flies and proceeds on its way."[34] In *Finnegans Wake*, the flesh is also made Word, in the words "*Homo Made Ink*" (342.23; Joyce's emphasis); the Letter written by A.L.P. and Shem resurrects H.C.E., and this process is analogous to the Gnostic ingathering.[35]

What Jonas distinguishes as the Syrian-Egyptian gnosis explains evil, darkness, and matter as the results of a divine error. This divine Fall is manifested in the Primal Man and the female Thought of God. Sophia ("Wisdom") is the personification of God's error. She is a combination of the Jewish Wisdom (*Chokmah*), the Divine agent of creation, and the Mother Goddess of the Near East; as such, she subsumes within herself the highest and lowest attributes, as one gathers from the appellation Sophia-Prunikos ("Wisdom the Whore").[36] Joyce's A.L.P., like this Sophia-Prunikos, is the principle of both sexuality and sublime poetic inspiration. The name Sophia and its variants occur several times in *Finnegans Wake*. Shem is being berated for not repopulating the land, and he is accused of thwarting the wishes of his "cogodparents, soph, among countless occasions of failing" (188.36-189.02); here there are references to the Fall and to Sophia ("soph") as the agent of God in the creation ("cogodparents"). In another place, "the sophology of Bitchson" is said to be motivated "by a purely dime-dime urge" (149.20-.21). Joyce also mentions: "sophister" (551.29), "*sophsterliness*" (354.18; Joyce's emphasis), "greataunt Sophy" (31.16), "Sophy" (155.26), "Sophy-Key-Po" (9.34-.35), and "sophykussens" (413.20).

Sophia bridges the enigmatic chasm that separates the God of light from the darkness. In both Valentinianism and the Barbelo gnosis (Shem has "a trio of barbels" on his chin, 169.14),[37] there is a higher Sophia, who is maintained within the Pleroma, or Godhead, and a lower Sophia, who falls into the dark world; this doubling of the figure ameliorates the strict dualism, just as in Finnegans Wake A.L.P. is the force of reconciliation. According to E. F. Scott, Sophia is "regarded not only as the object of redemption, but as herself assisting in the redemptive process - watching over the light until the deliverance comes."[38] Woman in Finnegans Wake is responsible for both the fall and the rise of man, in the gross sexual sense, at the microcosmic level of the individual with his female unconsciousness, and at the macrocosmic level of human history. One answer to Shem's riddle, "when is a man not a man?" (170.05), is "when lovely wooman stoops to conk him" (170.14). Evidence of the redemptive role of woman is to be found in phrases such as "The solid man saved by his sillied woman" (94.03) and "Ensouling Female Sustains Agonising Overman" (302.L1; Joyce's emphasis).

NOTES TO CHAPTER ONE

[1] *Letters of James Joyce*, III, 146, to Harriet Shaw Weaver, 24 November 1926 (hereafter cited as *Letters*).

[2] Power, *Conversations with James Joyce*, p.74. Joyce is also quoted as saying that "the modern theme is the subterranean forces, those hidden tides which govern everything and run humanity counter to the apparent flood: those poisonous subtleties which envelop the soul, the ascending fumes of sex" (p.54).

[3] For convenient summaries of the critics who support and oppose the theory that there is but one dreamer in *Finnegans Wake*, see: Clive Hart, *Structure and Motif in 'Finnegans Wake'*, pp.78-83 (hereafter cited as *Structure and Motif*); and James S. Atherton, *The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake'*, pp.11-14; Atherton believes that the book is best seen as a naturalistic novel. In a more recent analysis, Michael H. Begnal argues that each character in the book is a separate personality; in his view, "such a reevaluation of the narrative structure frees one from the Herculean task of justifying Earwicker's mind as some kind of Jungian unconscious, for the more productive exploration of the themes of the novel as a whole" (Part I of Michael H. Begnal and Grace Eckley, *Narrator and Character in 'Finnegans Wake'*, p.65). I am in disagreement with this position; as I show in Chapter Five of the present study, A.L.P. is the collective unconscious expressed through H.C.E., and the task of justifying such an interpretation is far from Herculean.

[4] Joyce made this comment to a Dr. O'Brien, who communicated it to Adaline Glasheen, who quotes it in "Out of My Census," *The Analyst*, No. 17 (1959), p.23; I have been unable to examine this article and have quoted Joyce's statement as it is given, via Glasheen, in Hart, *Structure and Motif*, p.81.

[5] H. R. Hall, "Death and Disposal of the Dead (Egyptian)," in *Encyclopedia of Religion and Ethics*, ed. James Hastings, John A. Selbie, and Louis H. Gray, IV, 458.

[6] Michael Stuart thinks that "with Joyce the Word is life-giving . . . A parallel to the magic evocative power of the word is to be found only in the Egyptian *Book of the Dead* and the *Popol Vuh* of the Central Americans" ("Mr. Joyce's Word-Creatures," p.461).

[7] *Language and Myth*, p.3.

[8] Smidt, pp.67-78.

[9] Apart from the copious references to magic in the works of Sigmund Freud and Carl Jung, see Géza Róheim, whose thesis is that "we find the magical attitude or behavior in every neurosis. Indeed, it is an

important part of every neurosis - and, even if we scratch only the surface, of every personality" (Magic and Schizophrenia, p.63).

[10] Richard Ellmann, James Joyce, p.79 (hereafter cited as JJ).

[11] Ibid., p.352.

[12] James Joyce and the Making of 'Ulysses' and Other Writings, p. 197 (hereafter cited as James Joyce and the Making of 'Ulysses').

[13] JJ, p.562; Ellmann's emphasis.

[14] Budgen, James Joyce and the Making of 'Ulysses', p.198; Ellmann, JJ, p.611. For further examples of prophecy, see: Ellmann, pp.375, 475, 522; and Atherton, Books at the Wake, pp.14-15.

[15] See Ellmann, JJ, p.287; and Stanislaus Joyce, The Complete Dublin Diary of Stanislaus Joyce, p.13, entry for 29 February 1904.

[16] Ellmann, JJ, p.275.

[17] Structure and Motif, p.25.

[18] See Ellmann, JJ, pp.10, 190, 336, 424, 581, 605, 643.

[19] Ibid., p.721.

[20] The Sacred River: An Approach to James Joyce, p.154.

[21] In "The First Version of Joyce's Portrait," ed. Richard M. Kain and Robert E. Scholes, p.362.

[22] Rev. Walter W. Skeat, An Etymological Dictionary of the English Language (1910), s.v. "gramarye" and "grammar."

[23] Norman O. Brown presents similar ideas in a rather idiosyncratic manner (Closing Time, pp.88-89).

[24] Giambattista Vico, The New Science of Giambattista Vico, p.141. For Vico, Joyce, and etymology, see Seán V. Golden, "The Kissier Licence: Liberty at the Wake."

[25] Language and Myth, p.4.

[26] Euclid, The Elements of Euclid: For the Use of Schools and Colleges, ed. Todhunter and S. L. Loney, p.9.

[27] John Read, Prelude to Chemistry: An Outline of Alchemy, Its Literature and Relationships, p.54.

[28] Hart, pp.84, 77.

[29] Aion: Researches into the Phenomenology of the Self, in The Collected Works of C. G. Jung, IX.2, 223-24.

[30] Proclus Diadochus, *A Commentary on the First Book of Euclid's Elements*, trans. Glenn R. Morrow, p.14 (16); the numbers in parentheses here and in the other references to Proclus refer to the page numbers in *Procli Diadochi in Primum Euclidis Elementorum Librum*, ed. Gottfried Friedlein (Leipzig, 1873); the Friedlein numbers are given in the margins of Morrow's translation.

[31] "Vico and Mathematics," in *Giambattista Vico: An International Symposium*, ed. Giorgio Tagliacozzo et al., p.431.

[32] *The Dialogues of Plato*, trans. Benjamin Jowett, III, 227. Jowett identifies passages in Plato by the Stephanus number only, and not by the letter; I follow his usage throughout.

[33] Atherton, p.65.

[34] Motycka, p.109.

[35] *Reading 'Finnegans Wake'*, pp.63, 138-48; *Hermes to His Son Thoth*, p.208. For details of other critical work on the subject, see n.200 in Chapter Two of the present study.

[36] *Yeats and Joyce*, pp.471-72; *Eminent Domain*, p.51.

NOTES TO CHAPTER TWO

[1] Sâr Mérodack Jósephin Péladan, pp.17-18. For Joyce and the religion and priesthood of art, see: Joseph Gerard Brennan, *Three Philosophical Novelists: James Joyce, André Gide, Thomas Mann*, pp.11-19; Robert Boyle, S.J., "'Astroglodynamonologos'"; Richard K. Cross, *Flaubert and Joyce: The Rite of Fiction*. For the theory that Stephen Dedalus can be compared to an initiate into the cults described in Jane Harrison's *Themis* (1912), see Doreen M. E. Gillam, "Stephen Kouros."

[2] Richard Ellmann, *James Joyce*, p.81.

[3] James Webb, *The Flight from Reason*, pp.183-84.

[4] Jolas, "My Friend James Joyce," in *James Joyce: Two Decades of Criticism*, ed. Seon Givens, p.13.

[5] *Anatomy of Criticism: Four Essays*, p.314. Arland Ussher, on the other hand, convinced that *Finnegans Wake* is a failure, writes that "the ambition to write a 'Prophetic Book' has ruined more than one artist" (*Three Great Irishmen: Shaw, Yeats, Joyce*, p.147). For Joyce and the Holy Bible, see: Virginia Moseley, *Joyce and the Bible*, and "Joyce and the Bible: The External Evidence," in *'Ulysses' cinquante ans après: témoignages franco-anglais sur le chef d'oeuvre de James Joyce*, ed. Louis Bonnerot, J. Aubert, and Cl. Jacquet (the article reviews Joyce's early exposure to the Bible at school); Arthur T. Broes, "The Bible in *Finnegans Wake*," and "The Bible in *Finnegans Wake* - Some Additions"; Fritz Senn, "Buybibles." For a good bibliography on the subject, see *Joyce and the Bible*, p.x.

[6] *The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake'*, p.14.

[7] Ibid., pp.229, 28. For the view that Joyce thought he was creating a Third Scripture that was a forgery, see p.70.

[8] Ibid., p.28. For the Book of Nature, see Sir Thomas Browne, *Religio Medici*, I.16, in *The Works of Sir Thomas Browne*, I, 24-26. Nicholas of Cusa observes that "there had been saints who regarded the world as a written book" (quoted in Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, p.321). See also: Curtius, Chap.xvi.7, "The Book of Nature," in ibid., pp.319-26; Hugh Kenner, *Dublin's Joyce*, pp.221-22; Eric McLuhan, "The Rhetorical Structure of *Finnegans Wake*," pp.395-96.

[9] George Berkeley has recourse to this phrase in *The Theory of Vision or Visual Language: Shewing the Immediate Presence and Providence of a Deity Vindicated and Explained* (1733), when he writes that "Vision is the Language of the Author of Nature" (in *The Works of George Berkeley D.D.; Formerly Bishop of Cloyne Including His Posthumous Works*, II, 397 [sec.38]). Shortly after this opening statement of his theme,

Berkeley distinguishes two types of language; "a great number of arbitrary signs, various and opposite, do constitute a Language. If such arbitrary connexion be instituted by men, it is an artificial language; if by the Author of Nature, it is a natural language" (ibid., pp.397-98 [sec.40]). According to J. Mitchell Morse, Stephen Dedalus only appears to reject Berkeley in the "Proteus" episode, for it is rather the popular misconception of Berkeley as a solipsist which he rejects; despite the fact that Stephen himself is a solipsist, he is later able to give evidence that he understands the real Berkeley (*U*,48). Morse deduces from "Proteus" that Joyce knew *An Essay towards a New Theory of Vision*, *The Theory of Vision or Visual Language*, and the third and fourth dialogues of *Alciphron*; in addition, he probably was acquainted with *A Treatise Concerning the Principles of Human Knowledge* and *Three Dialogues of Hylas and Philonous* (Morse, "Proteus," in *James Joyce's 'Ulysses': Critical Essays*, ed. Clive Hart and David Hayman, pp.36-37). For Berkeley in *Finnegans Wake*, see: Morse, p.36; Atherton, *Books at the Wake*, pp.97-98 et passim; and Adaline Glasheen, *A Second Census of 'Finnegans Wake': An Index of the Characters and Their Roles*, s.v. "Berkeley" (hereafter cited as *Second Census*). See also n.210 in Chapter Three of the present study.

[10] *Joyce-Again's Wake: An Analysis of 'Finnegans Wake'*, pp.100, 179-80. See also Margaret C. Solomon, *Eternal Geomater: The Sexual Universe of 'Finnegans Wake'*, p.100.

[11] Campbell and Robinson, pp.361-62 (hereafter cited as *Skeleton Key*).

[12] For an illuminating discussion of the book as a sacred object, see Jorge Luis Borges, "On the Cult of Books" (1951), in *Other Inquisitions: 1937-1952*.

[13] Curtius, *European Literature and the Latin Middle Ages*, pp.304-12; cf. Chap.xvi, "The Book as Symbol," pp.302-47.

[14] Oswald Spengler, *The Decline of the West*, II, 243.

[15] *The Koran*, trans. J. M. Rodwell, p.337; for the Mother of the Book, see Rodwell's note, p.337, n.2. For Joyce and the Koran, see: Atherton, *Books at the Wake*, pp.201-17; and Robert Bringhurst's corrections to Atherton's work in "The Koran, the *Wake*, and Atherton."

[16] *The Koran*, p.278. Atherton makes this observation (*Books at the Wake*, p.211).

[17] Arthur J. Arberry, *The Koran Illuminated: A Handlist of the Korans in the Chester Beatty Library*, p.xv; this work contains a magnificent series of coloured plates. On Islamic calligraphy, see Ibn Khaldûn, *The Muqaddimah: An Introduction to History*, II, 377-91 (I.v.29).

[18] William M. Schutte notes that Moore's "evenings" were in reality held on Saturday, and A.E.'s on Sunday; the only possible meeting on Thursday, the day of the week in *Ulysses*, would be that of A.E.'s Hermetic Society in Dawson Street ("Allusions in 'Scylla and Charybdis':

A Supplement to Weldon Thornton's List," p.319). For a discussion of Moore's rebuff to Joyce and of Moore generally in *Ulysses*, see Albert J. Solomon, "A Moore in *Ulysses*."

[19] The book of verses in question, *New Songs*, had been published and reviewed in April and May of 1904, before Bloomsday, 16 June 1904. Joyce's own poetry did not appear in the book (Weldon Thornton, *Allusions in 'Ulysses': An Annotated List*, s.v. "192.9/190.1"; Don Gifford and Robert J. Seidman, *Notes for Joyce: An Annotation of James Joyce's 'Ulysses'*, s.v. "190:1-2 [192:9-10]").

[20] Stuart Gilbert takes notice of the prophetic nature of Stephen's dream (*James Joyce's 'Ulysses'*, pp.116-17, 188). David L. McCarroll offers further remarks on the dream and contends that it is the most important antecedent of the meeting of Stephen and Bloom in the "Circe" episode ("Stephen's Dream - and Bloom's"). William Walcott states that what is known in Jungian psychology as synchronicity is manifested in the dream ("Notes by a Jungian Analyst on the Dreams in *Ulysses*").

[21] Gifford and Seidman trace the statement on the national epic to Dr. George Sigerson's essay "Ireland's Influence on European Literature," *Irish Literature*, 4 (1904), vii-xiii (*Notes for Joyce*, s.v. "190:22-23 [192:30-31]").

[22] See *Letters of James Joyce*, I, 333, telegram to Harriet Shaw Weaver from Paul Léon, 23 January 1933; I, 333, to Weaver from Miss Moschos, 29 January 1933; I, 334, to W. K. Magee, 6 February 1933.

[23] Ellmann, *JJ*, p.505; his source is an interview with Mrs. Claud W. Sykes, 1954.

[24] Ellmann, *Ulysses on the Liffey*, p.8.

[25] "Writers as Forerunners - The Sacred Book," in *The Irish Writers 1880-1940: Literature under Parnell's Star*, pp.16-20.

[26] *James Joyce's Scribbledehobble: The Ur-Workbook for 'Finnegans Wake'*, p.168; cf. p.104. Connolly's comment is on p.xiii; cf. p.viii.

[27] See William M. Schutte, *Joyce and Shakespeare: A Study in the Meaning of 'Ulysses'*, pp.59-66 and 175, n.2.

[28] Robert M. Adams shows some of the inconsistencies in Joyce's calculations for this problem, all the while admitting that "one looks like a fool in charging Joyce with errors in arithmetic" (*Surface and Symbol: The Consistency of James Joyce's 'Ulysses'*, p.182). See also Richard M. Kain, "The Significance of Stephen's Meeting Bloom: A Survey of Interpretations," in *'Ulysses': Fifty Years*, ed. Thomas F. Staley, pp.153-54.

[29] *Eminent Domain: Yeats among Wilde, Joyce, Pound, Eliot, and Auden*, pp.39-40. Stanislaus Joyce quotes his brother's statement as "I regret that you are too old to be influenced by me" (*My Brother's Keeper*, pp.182-83). Constantine P. Curran records it as "I come too late to

influence you; you are too old" (*James Joyce Remembered*, pp.33-34). For Joyce's early admiration of Yeats, see: S. Joyce, pp.112, 121, 140, 183; and Curran, pp.30-31. That Joyce felt an affinity with Yeats is shown by the copy of "The Salley Gardens" which he made for Nora on 2 August 1904 and signed "W. B. Yeats" (Ellmann, *JJ*, p.166). Ussher thinks it "probable that Joyce was influenced, more perhaps than he knew, by the hermeticism of Yeats," but he sees this as a negative influence on Joyce's predominant urge to express himself in the realistic mode (*Three Great Irishmen*, pp.125-26). For a more positive view, see William York Tindall, "James Joyce and the Hermetic Tradition," pp.31-32. For a good account of the relation of Yeats and Joyce to the Irish Literary Movement, see Thomas Flanagan, "Yeats, Joyce, and the Matter of Ireland."

[30] Hart, *Structure and Motif in 'Finnegans Wake'*, p.228.

[31] Ellmann, *Yeats: The Man and the Masks*, p.42.

[32] See Ellmann, *JJ*, pp.384-86. He notes that "the difference in age between Schmitz and Joyce was, as Harry Levin points out, roughly the same as that between Bloom and Stephen," without providing a reference to Levin (p.385).

[33] *Essays and Introductions*, p.187.

[34] Giorgio Melchiori, *The Whole Mystery of Art: Pattern into Poetry in the Work of W. B. Yeats*, p.22. For Yeats's remarks on *Prometheus Unbound*, see: "The Philosophy of Shelley's Poetry" (1900), in *Essays and Introductions*, p.65; and *Autobiographies*, p.87. In "The Symbolism of Poetry" (1900), Yeats writes that Gérard de Nerval "has been like Maeterlinck, like Villiers de l'Isle-Adam in *Axël*, like all who are preoccupied with intellectual symbols in our time, a foreshadower of the new sacred book, of which all the arts, as somebody has said, are beginning to dream" (*Essays and Introductions*, p.162). There were also books which nearly qualified as sacred, but were then rejected, such as Paul Valéry's *Cimetière Marin* (*A Vision* [1937], p.219).

[35] As Thornton notes, Yeats's Preface to Lady Augusta Gregory's book opens with the sentence "I think this book is the best that has come out of Ireland in my time"; Homer is not mentioned (*Allusions in 'Ulysses'*, s.v. "216.27/213.39"); see Yeats, *Explorations*, p.3. It seems, however, that Mulligan's statement is a combination of Yeats and Arnold, because according to Schutte, it is "as Thornton says . . . not from Yeats, but from Matthew Arnold, 'The Study of Poetry' (*Essays in Criticism: Second Series*, London, 1903, p.15) - 'One thinks of Homer; this is the sort of praise which is given to Homer, and justly given" (Schutte, "Allusions in 'Scylla and Charybdis,'" p.324). See also Schutte, *Joyce and Shakespeare*, p.68, n.2. Ellmann notes the allusion to Yeats's essay and says that "it is part of Joyce's involuted and unresolvable feeling towards Yeats that such derogatory comments are invariably put in the mouths of other characters than the autobiographical Stephen" (*Yeats and Joyce*, p.461).

[36] Yeats, p.27. In Owen Aherne's Introduction to the 1st ed. (1925) of *A Vision: An Explanation of Life Founded upon the Writings of Giraldus*

and upon Certain Doctrines Attributed to Kusta ben Luka, Michael Robartes describes his sojourn among the Judwalis and says, "I found that though their Sacred Book had been lost they had a vast doctrine which was constantly explained to their growing boys and girls by the aid of diagrams drawn by old religious men upon the sands, and that these diagrams were in many cases identical with those in the 'Speculum Angelorum et Hominorum'" (p.xix). Their sacred book is Kusta ben Luka's *The Way of the Soul between the Sun and the Moon*. The preceding passage does not appear in the 2nd ed. (1937) of *A Vision*.

[37] *The Variorum Edition of the Poems of W. B. Yeats*, p.555, line 27.

[38] "The Sacred Book of the Arts," p.585.

[39] Stéphane Mallarmé, *OEuvres complètes*, p.378; quoted in L.-J. Austin, "Mallarmé et le rêve du 'Livre,'" p.104. For the relation between Joyce and Mallarmé, see: Hayman, *Joyce et Mallarmé*; and Marshall McLuhan, "Joyce, Mallarmé, and the Press." Concerning Hayman's book, Hart finds it "impossible to believe and fruitless to suppose, for example, that we are meant to find 'Mallarmé' in every three-syllable word containing two 'm's' [in *Finnegans Wake*]" (*Structure and Motif*, p.29). Atherton thinks that Arthur Symons' account of Mallarmé in *The Symbolist Movement in Literature*, rather than the poet's own works, was Joyce's source of information about Mallarmé (*Books at the Wake*, p.49).

[40] Austin, "Mallarmé et le rêve du 'Livre,'" p.81.

[41] *Correspondance*, I, 244, to Henri Cazalis, 14 May 1867.

[42] Ibid., II, 301, 16 November 1885. For a full discussion of the concept of "le Livre," see Gardner Davies, *Vers une explication rationnelle du 'Coup de dés': essai d'exégèse mallarméenne*, pp.21-81.

[43] Hayman, *Joyce et Mallarmé*, I, 32.

[44] Joris Karl Huysmans, *OEuvres complètes de J.-K. Huysmans*, VII, 302; my emphasis.

[45] The connection between this passage and *A Rebours* is noted by: Hayman, *Joyce et Mallarmé*, I, 33; Atherton, *Books at the Wake*, p.257; and Cyril Connolly, *The Modern Movement: One Hundred Key Books from England, France and America 1880-1950*, p.81. Atherton adds that "blackfrinch pliestrycook" (486.17) refers to the all-black dinner in *A Rebours*.

[46] Hart connects the *ex ungue leonem* motif with Matt. 7:20 (*Structure and Motif*, p.219). Erich Neumann writes of "the law of *pars pro toto* governing all entities related to one another in *participation mystique*. Wherever an identity is established between persons and objects, it applies - according to this law - also to their parts. . . . every part contains the totality to which it belongs" (*The Great Mother: An Analysis of the Archetype*, p.44, n.13).

[47] Kenner writes that "it was by learning to rehearse the psychic gestures of the Seafarer-bard that Pound prepared an English for Divus to speak through him when he was finally possessed by Divus, who had been possessed by Homer, who in his time had been possessed by Odysseus and prompted by a Muse. The nekuia that is now Canto I was perhaps 'easy to write,' in a remarkable period when Pound wrote so much else; perhaps Divus/Homer took possession, once Pound had made ready the cadences and idioms, and filled his mind with the sharp-cut vowels and the shock of the alliterations" ("Blood for the Ghosts," p.70).

[48] Sullivan, ed., p.3.

[49] Ibid. For a remark on the burial of the two books, see Campbell and Robinson, Skeleton Key, p.103.

[50] Sullivan, ed., p.4.

[51] Ibid., p.5.

[52] Huysmans, OEuvres completes, VII, 26; his emphasis.

[53] Marius the Epicurean: His Sensations and Ideas, I, 53-56, 93. Part I, Chap.v, "The Golden Book," is a discussion of the Metamorphoses. For Joyce and Pater, see Robert M. Scotto, "'Visions' and 'Epiphanies': Fictional Technique in Pater's Marius and Joyce's Portrait."

[54] The Complete Dublin Diary of Stanislaus Joyce, p.46.

[55] The relevant passage is: "He went through the streets at night intoning phrases to himself. He repeated often the story of The Tables of the Law and the story of the Adoration of the Magi. The atmosphere of these stories was heavy with incense and omens and the figures of the monk-errants, Ahern [sic] and Michael Robartes strode through it with great strides. Their speeches were like the enigmas of a disdainful Jesus; their morality was infrahuman or superhuman: the ritual they laid such store by was so incoherent and heterogeneous, so strange a mixture of trivialities and sacred practices that it could be recognised as the ritual of men who had received from the hands of high priests, [who had been] anciently guilty of some arrogance of the spirit, a confused and dehumanised tradition, a mysterious ordination." The first brackets are mine, the second those of the editors of Stephen Hero, Theodore Spencer, John J. Slocum, and Herbert Cahoon. See Ellmann, Yeats and Joyce, p.448.

[56] Yeats, Mythologies, p.283.

[57] Ibid., p.296.

[58] Ibid. For Joyce and Joachim of Flora, see: Adams, Surface and Symbol, pp.125-26; and Thornton, Allusions in 'Ulysses', s.v. "39.37/40.37," "40.1/41.1," and "243.3/239.23." For Joachism, see: R. Freyhan, "Joachism and the English Apocalypse"; Ruth Kestenberg-Gladstein, "The 'Third Reich': A Fifteenth-Century Polemic against Joachism, and Its Background"; and Norman Cohn, The Pursuit of the Millennium: Revolutionary Millenarians and Mystical Anarchists of the Middle Ages, pp.108-10.

[59] Mythologies, p.298.

[60] Ibid., p.196.

[61] Ibid., p.297.

[62] Ibid., p.300.

[63] Ibid., p.306.

[64] JJ, p.392.

[65] Quoted in ibid., pp.558-59, from Power, From an Old Waterford House, p.67 (no publication data supplied), and Ellmann's interview with Power, 1953.

[66] See JJ, pp.22, 488, 538, 599, 635, 728; and Letters, I, 134, to Frank Budgen, 3 January 1920, and III, 52, to Harriet Shaw Weaver, 1 November 1921. The International Protest against Samuel Roth, who illegally printed sections of Ulysses in Two Worlds Monthly until October 1927, was dated and released 2 February 1927 (JJ, p.599).

[67] JJ, p.539. For details of the publication of Ulysses, see Slocum and Cahoon, A Bibliography of James Joyce 1882-1941, #17, pp.24-26 (hereafter cited as Bibliography).

[68] Slocum and Cahoon, Bibliography, #62, p.99; Ellmann, JJ, p.574.

[69] It is not precisely true that Anna Livia Plurabelle was the first part of Finnegans Wake to appear in book form. Slocum and Cahoon note that Work in Progress Volume I (1928) and Work in Progress Part 11 and 12 (1928) were published prior to Anna Livia Plurabelle, but they were not for sale, being merely limited reprints for copyright purposes of fragments which appeared in transition in 1927 and 1928 respectively (Bibliography, ##30-32, pp.41-45). For complete details of the publication of Work in Progress in book form, see Bibliography, ##32-38, 41-43, 46, pp.44-51, 53-56, 58. For contributions of parts of Work in Progress to periodicals, see Bibliography, ##62, 64-67, 70, 79, 90, pp.99-104. For details of composition and publication up to 1932, see Ellmann, JJ, pp.801-03. For a chronology of Joyce's composition and publication 1914-39, see A. Walton Litz, Appendix C, The Art of James Joyce: Method and Design in 'Ulysses' and 'Finnegans Wake', pp.142-49. I have personally examined all the fragments from Work in Progress published in book form which I describe in the main text.

[70] Joyce, Anna Livia Plurabelle, p.3; original spacing.

[71] For bibliographical description, see Slocum and Cahoon, Bibliography, #36, pp.48-49. They note that the New York Public Library copy is dated 9 August 1929; the copy which I examined at the University of Alberta is dated June 1929 in the colophon.

[72] Slocum and Cahoon describe this mark as a publisher's emblem (ibid., #36, p.48).

[73] Joyce, p.32.

[74] Brancusi's design appears opposite p.1; it is also the Frontispiece to Ellmann, *JJ*. In a letter to Harriet Shaw Weaver, Joyce sketches a spiral and two lines to illustrate Brancusi's design, with the comment "O *please* trun [sic] over!" (his emphasis; cf. *FW*,286.18, "plates to lick and turn over"); he follows this with the remark, "his design of me will attract certain buyers. But I wish he or Antheil, say, could or would be as explicit as I try to be when people ask me: And what's this here, Guvnor?" (*Letters*, I, 279, 27 May 1929).

[75] *JJ*, p.627; Ellmann takes his information from an interview with James F. Spoerri. In a letter to Harriet Shaw Weaver, Joyce writes, "when he [John Joyce] got the copy I sent him of *Tales Told* etc (so they write me) he looked a long time at Brancusi's Portrait of J.J. and finally remarked: Jim has changed more than I thought" (*Letters*, I, 312, 17 January 1932).

[76] *JJ*, p.627; Ellmann takes his information from an interview with C. Brancusi, 1954. L. A. Murillo connects Brancusi's spiral with the labyrinth and the release of forces; he also sees it as a link between the infinite and the finite, because it can be followed either way, in or out, and therefore it is a figure of equilibrium. Perhaps he goes too far when he asks us to see the four parts of *Finnegans Wake* in the four turns of the spiral (*The Cyclical Night: Irony in James Joyce and Jorge Luis Borges*, pp.74, 76, 77).

[77] Published by Faber and Faber in 1930, this edition is essentially a reprint of the 1928 edition of *Anna Livia Plurabelle*. For details, see Slocum and Cahoon, *Bibliography*, #33, pp.45-46.

[78] My account of the edition is taken practically verbatim from the description given opposite the title page. See Slocum and Cahoon, *Bibliography*, #41, pp.53-54; they note that a report of publication is provided in Jack Kahane, *Memoirs of a Booklegger* (London: Michael Joseph, [1939]).

[79] For bibliographical details, see *Bibliography*, #42, p.54, and #37, pp.49-50, respectively.

[80] *Letters*, III, 234, to Harriet Shaw Weaver, 21 November 1931; also cited in *JJ*, p.654. According to Slocum and Cahoon, *The Joyce Book* was published in 1933 (*Bibliography*, #29, pp.40-41).

[81] *JJ*, p.671.

[82] *Letters*, I, 317, to Harriet Shaw Weaver, 20 April 1932; also quoted in *JJ*, p.663.

[83] *Letters*, I, 365, to Harriet Shaw Weaver, 1 May 1935; also cited in *JJ*, p.695.

[84] *JJ*, p.671. For bibliographical details of *Pomes Penyeach* (1927),

see Slocum and Cahoon, *Bibliography*, ##24-28, pp.35-40; they write that the 1932 edition (Paris: The Obelisk Press; London: Desmond Harmsworth) has "Initial Letters Designed and Illuminated by Lucia Joyce," with the "entire text in facsimile of the handwriting of James Joyce, with colored initial at the beginning of each poem" (#27, pp.38-39). The title page of *Pomes Penyeach* is reproduced in Chester G. Anderson, *James Joyce and His World*, p.121. According to Peter Spielberg, the collection of Joyce material at the University of Buffalo contains Lucia's notebooks and drawings, but he does not catalogue these (Spielberg, comp., *James Joyce's Manuscripts and Letters at the University of Buffalo: A Catalogue*, p.x).

[85] Joyce, p.[vi]; repeated in the colophon, p.[79]. For bibliographical details, see Slocum and Cahoon, *Bibliography*, #43, pp.55-56.

[86] According to Mary Colum and Padraic Colum, Lucia's illuminated initials revealed "a real artistic gift. Her lettering attracted a good deal of notice, including a mention by the art critic of the *Revue des deux Mondes*, who compared her designs to those of the Book of Kells" (*Our Friend James Joyce*, p.223).

[87] For bibliographical details, see Slocum and Cahoon, *Bibliography*, #46, pp.58-59.

[88] Joyce, p.[17].

[89] For discussion of this passage, see Robert F. Gleckner, "Joyce and Blake: Notes toward Defining a Literary Relationship," in *A James Joyce Miscellany*, 3rd series, ed. Marvin Magalaner, pp.206-07; Gleckner discusses about sixty references to Blake in *Finnegans Wake*. Adams considers Blake's relation to the Black Mass in *Ulysses* (*James Joyce: Common Sense and Beyond*, p.159). Stanislaus Joyce says that Joyce's attention was drawn to Blake through the Yeats-Ellis edition (*My Brother's Keeper*, p.112). Robert Kellogg thinks that Joyce considered Blake the greatest Romantic ("Scylla and Charybdis," in *James Joyce's 'Ulysses'*, ed. Hart and Hayman, pp.152-58). Karl Kiralis compares *Jerusalem* and *Finnegans Wake* ("Joyce and Blake: A Basic Source for *Finnegans Wake*"). See also: Atherton, *Books at the Wake*, pp.235-36; Budgen, *James Joyce and the Making of 'Ulysses' and Other Writings* pp.318-20; Frye, "Quest and Cycle in *Finnegans Wake*"; Mort D. Paley, "Blake in Nighttown," in *A James Joyce Miscellany*, 3rd series.

[90] Ellmann, *JJ*, p.272.

[91] Ibid., pp.669-72. For Joyce's eye problems, see: Ruth von Phul, "Joyce and the Strabismal Apologia," in *A James Joyce Miscellany*, 2nd series, ed. Magalaner; and J. B. Lyons, *James Joyce's Miltonic Affliction*.

[92] *Letters*, III, 385.

[93] Ellmann, *JJ*, p.688.

[94] *Letters*, I, 350, 21 October 1934; also quoted in *JJ*, p.690.

[95] Ellmann, JJ, p.690.

[96] See Letters, I, 354, to Harriet Shaw Weaver, 17 December 1934; also cited in JJ, p.690.

[97] Letters, I, 378-79, 10 August 1935; also quoted, with a slight omission, in JJ, p.690.

[98] JJ, p.658.

[99] Ibid., p.679.

[100] Ibid., p.669.

[101] Ibid., p.689; this letter is not in the Letters, but is quoted in full by Ellmann. In a letter to Harriet Shaw Weaver, Joyce mentions Lucia's letter and explains that the hotel in question is where he and Nora honeymooned (Letters, I, 349-50, 21 October 1934).

[102] Hélène Cixous thinks so (The Exile of James Joyce, p.66).

[103] JJ, p.663; Ellmann is quoting a letter from Paul Léon to Harriet Shaw Weaver, 19 July 1935, in which Léon quotes Joyce.

[104] Ibid., p.674; Ellmann takes his information from an interview with Mme. Lucia Léon, 1953.

[105] Ibid., p.697; Ellmann takes his information from an interview with Mrs. Maria Jolas, 1953.

[106] Ibid., p.693.

[107] Ibid., p.692; Ellmann takes his information from an interview with Carl Gustav Jung, 1953.

[108] Letter from Jung to Patricia Hutchins; quoted in ibid., p.692, n., from Hutchins, James Joyce's World, pp.184-85.

[109] JJ, p.692; Ellmann takes his information from an interview with Jung, 1953.

[110] Ibid., pp.692-93.

[111] See Jung, "Ulysses: A Monologue" (1932), in The Collected Works of C. G. Jung, XV, 109-34.

[112] JJ, p.663.

[113] Ibid., p.695; the letter is dated 4 April 1935. Ellmann does not give a source.

[114] Ibid., p.692, n. Italo Svevo and Rosa Maria Bosinelli Bollettieri both testify to Joyce's ignorance of psychoanalysis until a late

date (*James Joyce*, pp.[60-61]; "The Importance of Trieste in Joyce's Work, with Reference to His Knowledge of Psycho-Analysis"). Budgen witnesses Joyce's impatience with the attempts to make a philosophy out of psychoanalysis and quotes him as saying, "why all this fuss and bother about the mystery of the unconscious? . . . What about the mystery of the conscious? What do they know about that?" ("Further Recollections of James Joyce," in *James Joyce and the Making of 'Ulysses'*, p.356). Nevertheless, it has been demonstrated that Joyce did become familiar with psychoanalysis and that he echoes specific ideas and texts in his work. The best study of Joyce and psychoanalysis is still Frederick J. Hoffman's "Infroyce." Adams considers Freud to be Stephen's basic inspiration in the "Scylla and Charybdis" episode (*James Joyce: Common Sense and Beyond*, p.146). Alison Armstrong points out that Freud's "The Case of the Wolf-man; from The History of an Infantile Neurosis" is a source for *FW*,II.1 ("Shem the Penman as Glugg as the Wolf-man"). Mark Shechner sets out with the orthodox thesis that Joyce's books are to a large extent "the records of his analytic transactions with his own unconscious" (*Joyce in Nighttown: A Psychoanalytic Inquiry into 'Ulysses'*, p.18). William P. Fitzpatrick discusses Stephen's symbolic initiation in the light of Jungian analysis ("The Myth of Creation: Joyce, Jung, and *Ulysses*"). Glasheen outlines the role of the early American psychiatrist Morton Prince in *Finnegans Wake* ("*Finnegans Wake* and the Girls from Boston, Mass."). See also: Atherton, *Books at the Wake*, pp.37-41 et passim; Edward Brandabur, *A Scrupulous Meanness: A Study of Joyce's Early Work*; Cixous, *Exile of James Joyce*; Elliott Coleman, "A Note on Joyce and Jung"; Edmund L. Epstein, *The Ordeal of Stephen Dedalus: The Conflict of the Generations in James Joyce's 'A Portrait of the Artist as a Young Man'*; Hart, *Structure and Motif*, p.214; Denise M. Helms, "A Note on Stephen's Dream in *Portrait*"; Rolf R. Loehrich, *The Secret of Ulysses: An Analysis of James Joyce's 'Ulysses'*; L. A. G. Strong, *The Sacred River: An Approach to James Joyce*, pp.88, 156, et passim; Walcott, "Notes by a Jungian Analyst on the Dreams in *Ulysses*." In his review essay "Freud on Joyce," Shechner discusses the contributions of Brandabur and Epstein, above, and of Sheldon Brivic, "James Joyce: From Stephen to Bloom," in *Psychoanalysis and Literary Process*, ed. Frederick Crews (Cambridge: Winthrop, 1970); the last I have been unable to examine.

[115] *Skeleton Key*, p.104, quoting from Sullivan's Introduction to his edition of *The Book of Kells*, 4th ed. (London, 1933), p.10. Atherton quotes a slightly different version of the remark from the 2nd ed. (London, Paris, New York: Studio Press, 1920), p.10 (*Books at the Wake*, p. 63). In the 1st ed. (London, New York, Paris: "The Studio" Ltd., 1914), this remark reads "the symbol C, known in Irish MSS. as 'head under the wing' or 'turn under the path' . . . indicates that the words immediately following it are to be read after the end of the next full line" (p.7). Ellmann incorrectly refers to "Sir Edward O'Sullivan" (*JJ*, p.558).

[116] *JJ*, p.692, n.

[117] Ibid., p.272.

[118] Jack P. Dalton, "More Numbers," p.6. Grace Eckley thinks that having the girls number twenty-nine is an attempt at reconciling lunar and solar time (in Michael H. Begnal and Eckley, *Narrator and Character*

in 'Finnegans Wake', p.176). One concludes that she has read Robert Graves, who writes, "I have mentioned the impossibility of reconciling Solar and Lunar time; yet it is mythologically recorded that the Sun-Goddess Grainne and her lover the Moon-hero Diarmuid bedded together every evening of the year during their flight across Ireland" ("Lecture Two, 1965," in *Poetic Craft and Principle*, p.149).

[119] *Letters*, I, 264, 8 August 1928. Atherton quotes much of this letter and discusses it (*Books at the Wake*, pp.188-89). Cf. Joyce's remark that "it seems as if this year (1+9+2+1=13) is to be one incessant trouble to me" (*Letters*, I, 161, to Harriet Shaw Weaver, 3 April 1921); Joyce's use of the old method of occult addition betrays his deep interest in numerology. For twenty-eight as the moon, see his notes to *Exiles*,113. For Joyce's use of number, see: Adams, *James Joyce: Common Sense and Beyond*, p.182; Ronald Bates, "The Feast is a Flyday"; Boyle, "Penelope," in *James Joyce's 'Ulysses'*, ed. Hart and Hayman, p.412; Anthony Burgess, *Joysprick: An Introduction to the Language of James Joyce*, pp.20-21; Alan M. Cohn, "Answers 11"; Dalton, "Answers 16," "More Numbers," "More Numbers - Addendum," "One and Thirty," "One and Thirty - Addendum," and "Note," *AWN*, NS 1 (1964), 6; Finn Dano, "A Note on 'Eleven'"; Nathan Halper, "11 and 32"; Hart, "Query 11: Thickest Mud," and *Structure and Motif*, pp.186-87 et passim; Hart and Senn, "The Mathematical Problems (II.2)"; M. J. C. Hodgart, "Correspondence"; Kenner, "Query"; Ian MacArthur, "Combinations and Permutations (284.12)"; Morse, "1132"; Paul C. Obler, "Joyce's Numerology: A Knot in the Labyrinth"; Danis Rose, "Ad Maturing Daily Glory Aims (282.6)"; Maren-Sofie Røstvig, "The Hidden Sense: Milton and the Neoplatonic Method of Numerical Composition," in *The Hidden Sense and Other Essays*, pp.110-12; Fritz Scheele, "Answers 11"; Hugh B. Staples, "Some Notes on the One Hundred and Eleven Epithets of HCE"; Philip B. Sullivan, "1132," and "1132 and All That."

[120] Ellmann, *JJ*, pp.670-71. See also *Letters*, III, 384, to Mary M. Colum, 5 June 1936; and III, 385, to Harriet Shaw Weaver, 9 June 1936; along with the notes by the editor, Ellmann, pp.384-85.

[121] See Campbell and Robinson, *Skeleton Key*, pp.103-05 et passim; Atherton, *Books at the Wake*, pp.61-67 et passim; Solomon, *Eternal Geomater*, pp.59-63 et passim. Although Solomon's is a valuable study, she suffers from the common tendency of forcing her examples into preconceived categories. For instance, discussing *FW*,321.26-.29, which portrays the father as Noah-God, she glosses "to hide in dry" as "*dreizwei* (three-two)"; this is surely pushing her useful "three-two" theory to extremes (p.151, n.37). Like Freud, she also leaves herself open to the charge of seeing genital symbols where they do not exist.

[122] Sullivan, ed., p.34; Professor Hartley's findings were published, according to Sullivan, in *Proceedings of the Royal Dublin Society*, NS 4 (1885). For those interested in pursuing the matter, some of Hartley's conclusions have recently been cast into doubt by H. Roosen-Runge and A. E. A. Warner, who state that bright red must be red lead and not realgar, because of superficial blackening, that green must be verdigris, because of stains, and that purple must be folium, which fact has been determined by microscopic analysis ("The Pictorial Technique of

the Lindisfarne Gospels," in *Evangeliorum Codex Lindisfarnensis*, II, 274.

[123] Graves, *The White Goddess: A Historical Grammar of Poetic Myth*, pp.245-46. According to Murphy, "blackthorn" (114.11) is derived from Sullivan, ed. (1925 ed.), p.60 ("More from the Book of Kells," p.73); I am unable to locate this word in the 1st ed. (1914).

[124] Atherton says that because of the two left feet of the Christ-child in Plate II (fol.7^{v}) of Sullivan's ed., Joyce thought the scribe of *The Book of Kells* anti-christian (*Books at the Wake*, p.65).

[125] *Variorum Edition of the Poems*, pp.483, 565-67. According to Allan Wade, *The Winding Stair*, in which "Oil and Blood" first appeared, was published 1 October 1929 (*A Bibliography of the Writings of W. B. Yeats*, #164, p.165). A. N. Jeffares says that the poem was composed in December 1927, revised in the next two years, and first published in *The Winding Stair and Other Poems*, which he dates 1933 (*A Commentary on 'The Collected Poems of W. B. Yeats'*, #270, p.329). If Wade's date is accepted, then Joyce could not have taken the phrase "lazily eye of the lapis" (293.11) from "Oil and Blood," unless he saw the poem before it was published. According to Slocum and Cahoon, *Tales Told of Shem and Shaun* is dated 9 August 1929 (*Bibliography*, #36, pp.48-49); the colophon of the copy I examined is dated June 1929; both dates are previous to Wade's date. The phrase "lazily eye of the lapis" does not appear in the 1926 draft of the passage (Joyce, *A First-Draft Version of 'Finnegans Wake'*, ed. Hayman, p.31); however, it is in *Tales Told of Shem and Shaun* (1929), p.32.

[126] *Books at the Wake*, p.64. He is quoting Sullivan, 2nd ed. (1920), pp.24 and 47; these two statements, with slight differences, are to be found on pp.18 and 34 of the 1st ed. (1914): read "error" for "errors" in the first, and "haematite" for "Haemetite" in the second. What evidence there is of the editions which Joyce used seems to be conflicting. Both Campbell and Robinson (*Skeleton Key*, p.105, n.18) and Atherton (p.66) say that Joyce's "These paper wounds, four in type, were gradually and correctly understood to mean stop, please stop, do please stop, and O do please stop respectively" (124.03-.05) refers to Sullivan's discussion of the punctuation in *The Book of Kells*; according to Atherton, "Sullivan said that there were four ways in which a period or full stop could be represented in *The Book of Kells*." Since Sullivan only mentions three types of full stop in the 1st ed. (p.25), and since I have not had the opportunity of examining the 2nd ed. to check the accuracy of Atherton's reading, it might be concluded that Joyce used the 2nd ed. However, Joyce speaks of having *The Book of Kells* before 1920, or so it can be inferred. He said to Power, "in all the places I have been to, Rome, Zurich, Trieste, I have taken it about with me, and have pored over its workmanship for hours" (Ellmann, *JJ*, pp.558-59); since Joyce lived in Zurich from June 1915 to October 1919 and in Trieste from October 1919 to July 1920 (*JJ*, pp.401, 483, 496), the edition of *The Book of Kells* which he carried about with him in these places could only have been the 1st (1914), and not the 2nd (1920). Until one observer can assemble and compare the various and rare editions, the question of the edition Joyce used must remain uncertain. As it is, we have responsible

observers like Solomon pointing out that Molly Bloom's final monologue in *Ulysses*, like the Kells MS, is unpunctuated (*Eternal Geomater*, p.67); this would be an astute observation, but for the fact that the MS is, as Sullivan remarks, punctuated.

[127] See Atherton, *Books at the Wake*, pp.60-61.

[128] *James Joyce's Manuscripts and Letters at the University of Buffalo*, p.100. The Workbook in question is *Finnegans Wake* Holograph Workbook, MS.VI.B.46, Wickser Collection, Lockwood Library, University of Buffalo, Buffalo, New York; for a bibliographical description and dating (ca.1937-38), see Spielberg, pp.124-25.

[129] *Letters*, I, 234, to Harriet Shaw Weaver, 10 October 1925. Campbell and Robinson remark that both *The Book of Kells* and *Finnegans Wake* employ embellishment (*Skeleton Key*, pp.103-04).

[130] On Homer's decorative and loose style (*lexis eiromene*), see Cedric H. Whitman, *Homer and the Heroic Tradition*, pp.99-100.

[131] Budgen, "Further Recollections of James Joyce," in *James Joyce and the Making of 'Ulysses'*, p.364. For the view that Joyce organized but did not create, see Hart, *Structure and Motif*, pp.44-45.

[132] Thomas Medwin, *The Life of Percy Bysshe Shelley*, p.112; Shelley quoted the remark to Leigh Hunt.

[133] According to Sullivan's Introduction, the script of *The Book of Kells* is modelled, with occasional deviations, on the Roman half-uncial (p.23), but, of the other two hands in evidence, the first tends to the minuscule form of writing, while the second is "entirely minuscule, and of the character called pointed" (p.24); he is quoting the Introduction to Bond and Thomson's *Facsimiles of Manuscripts* (1873-83). Françoise Henry, however, is of the opinion that the dominant handwriting is "a most imposing form of Insular majuscule which includes occasionally some minuscule forms, mostly e and s" (Henry, ed., *The Book of Kells: Reproductions from the Manuscript in Trinity College Dublin* [1974], pp.154-55); see also her *Irish Art during the Viking Invasions (800-1020 A.D.)*, p.70.

[134] For the manuscripts and drafts of *Finnegans Wake*, see: Boyle, "*Finnegans Wake*, Page 185: An Explication"; Hayman, ed., *A First-Draft Version of 'Finnegans Wake'*, along with Dalton's critique of Hayman's work in "I Say It's Spinach - Watch!" and "Spinach - Addendum"; Fred H. Higginson, "The Text of *Finnegans Wake*," in *New Light on Joyce from the Dublin Symposium*, ed. Senn; Litz, *The Art of James Joyce*; Slocum and Cahoon, *Bibliography*, pp.145-48. Joyce's Holograph Workbooks for *Finnegans Wake*, plus the Typescripts, Galley Proofs, Page Proofs, Errata Sheets, and Transcripts of the Workbooks by his amanuensis Mme. Raphael, are catalogued as VI.A-H in Spielberg, *James Joyce's Manuscripts and Letters at the University of Buffalo*, pp.95-151. The only portion of this material to be published in book form is VI.A, which appears under the title *James Joyce's Scribbledehobble: The Ur-Workbook for 'Finnegans Wake'*; the editor, Connolly, has marked the notes from this Workbook which

appear in the final text of Finnegans Wake. In "A List of Corrections for the Scribbledehobble," Hayman lists 268 errors in Connolly's work. In "Chronology of the Buffalo Notebooks," Roland McHugh transcribes every item from the B and D Notebooks which he recognizes as occurring in Finnegans Wake. The following discuss Joyce's use of the Notebooks: Atherton, "To Give down the Banks and Hark from the Tomb!" (Huckleberry Finn in Finnegans Wake); Hayman, "The Distribution of the Tristan and Isolde Notes under 'Exiles' in the Scribbledehobble," and "'Scribbledehobbles' and How They Grew: A Turning Point in the Development of a Chapter," in Twelve and a Tilly: Essays on the Occasion of the 25th Anniversary of 'Finnegans Wake', ed. Dalton and Hart (the latter considers the evolution of FW,II.2); Leo Knuth, "Dutch in Finnegans Wake Holograph Workbooks VI.B.22 and VI.B.26," "Dutch Elements in Finnegans Wake pp.75-78 Compared with Holograph Workbook VI.B.46," "Knuth 'Dutch Elements' (V.2), 'Malay Elements' (V.4)," and "Some Notes on Malay Elements in Finnegans Wake."

According to Litz, Finnegans Wake was begun in March 1923 ("The Genesis of Finnegans Wake"); Joseph Prescott argues for the summer of 1923 ("Concerning the Genesis of Finnegans Wake"). All commentators agree that Joyce's method of composition was one of accretion. In 1931, Michael Stuart remarked that the "ornamentation of structure, language, and character-creation arise undoubtedly from a compelling soul-need familiar to theologians of weaving a rich network of detail around the thread of an idea, a trait most noticeable in Gothic architecture and in the work of medieval book-illuminators" ("Mr. Joyce's Word-Creatures," p.460). Litz describes Joyce's method as "ceaseless elaboration upon a static pattern," and compares it to mosaic work and The Book of Kells; after 1927, says Litz, Joyce was concerned only with what he himself described as "stratification" ("The Making of Finnegans Wake," in A James Joyce Miscellany, 2nd series, ed. Magalaner, pp.212, 213). In another article, Litz thinks the MSS demonstrate the continuity of Joyce's career, the method of inclusion and synthesis, and Joyce's mental habits, namely, "exaggerated orderliness," "grotesque pedantry," and "obstinate and avaricious hoarding of words and phrases" ("Uses of the Finnegans Wake Manuscripts," in Twelve and a Tilly). Hodgart gives the texts of the first four sections of Finnegans Wake to be written, along with minute descriptions, and remarks that after being assured in 1927 of regular publication in transition, Joyce's method of composition changed to one of elaboration ("The Earliest Sections of Finnegans Wake," p.18). Spielberg compares the methods of constant addition in Ulysses and Finnegans Wake; expansion, he says, is not a method unique to Joyce, but the degree of addition is (James Joyce's Manuscripts and Letters at the University of Buffalo, pp.x, xi). According to Hayman, Joyce rarely discarded material already generated, with three exceptions, which he discusses ("'Scribbledehobbles' and How They Grew: A Turning Point in the Development of a Chapter"). See also: Atherton, Books at the Wake, pp.59-61; and Hart, Structure and Motif, pp.38-43, 182-200.

The A.L.P. chapter (FW,I.5) has attracted special attention and study. Higginson demonstrates the development of the chapter and reproduces six basic versions; Joyce's method of composition is described as addition and conflation, mosaic, and "frame-squeezing: the morphemes have no place to go but together" (Joyce, Anna Livia Plurabelle: The Making of a Chapter, ed. Higginson, pp.16, 13). Litz calls the method "amalgamation"; he agrees with Edmund Wilson (see below) that anastomosis of matter and form was taken too far; when elaboration is not bounded, as in Joyce, it ceases to be fruitful after a certain point ("The Evolution of Joyce's Anna Livia Plurabelle," pp.46, 48). Theodore B. Dolmatch agrees that the "encrustation" obscures the text; he compares variants ("Notes and Queries Concerning the Revisions in Finnegans Wake," p.145). Atherton and Higginson remark further aspects of the chapter's evolution ("Parsing Secheressa"; "Two Letters from Dame Anna Earwicker").

Budgen testifies that Joyce's method of composition was the complete opposite of the surrealist methods of automatism; he quotes Joyce as saying to August Suter, concerning the composition of Finnegans Wake, "I feel like an engineer boring into a mountain from two sides. If my calculations are correct we shall meet in the middle. If not . . . "; Budgen remarks that "whatever philosophy of composition that indicates, it is certainly neither automatic nor convulsive" ("Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', p.356). The idea that Joyce had complete artistic control at all times is popular in critical circles. Higginson, however, says that Joyce was less attentive in correcting than he should have been ("The Text of Finnegans Wake," in New Light on Joyce, ed. Senn, p.121). The idea that Joyce sometimes created at random has a certain currency. Ellmann records the story that Samuel Beckett transcribed a "Come in" into the text of Finnegans Wake when Joyce answered the door in these words and that the phrase was allowed to stand (JJ, p.662). Both Staples and Higginson say that no such phrase occurs in the book ("Beckett in the Wake," p.421; "The Text of Finnegans Wake," p.125); Higginson does give evidence of other adventitious creation. Earlier, Adams expressed his belief in the Beckett story and concluded that Joyce lost control and relied on accident; "in the last part of his life he was writing in such a way that one cannot distinguish significant and purposeful from insignificant and accidental elements in his writing" ("The Bent Knife Blade: Joyce in the 1960's," pp.514, 515). As early as 1929, Wilson criticized Finnegans Wake for its over-insistence on multiplying detail at the expense of the drama (The Wound and the Bow: Seven Studies in Literature, p.266); as we have seen, Litz and Dolmatch agree with this assessment.

Ulysses is also fertile ground for critics studying Joyce's methods of composition. Litz writes that the book is an ideal example of "Paul Valéry's remark that a work of art is never finished, but only abandoned" (The Art of James Joyce, p.7); again, Joyce's method is said to be accretive. Concerning the words "Perfume of embraces all him assailed. With hungered flesh obscurely, he mutely craved to adore" (U,168), Joyce is quoted by Budgen as saying, "I have the words already. What I am seeking is the perfect order of words in the sentence. There is an order in every way appropriate" ("Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', p.200). Adams suggests that Ulysses is filled with unmodified material from life, so that the concept of Joyce as the pure aesthetician must be modified (Surface and Symbol, pp. 245-49); for studies of the text and MSS, see his Appendices A, B, and C. Richard E. Madtes is another proponent of the view that Joyce's technique is accretive and that he made few deletions; "each successive version became a new foundation on which to erect additional superstructure" ("Joyce and the Building of Ithaca," p.443). See also: James Van Dyck Card, "'Contradicting': The Word for Joyce's 'Penelope,'" "A Gibraltar Sourcebook for 'Penelope,'" and "The Misleading Mr. McAlmon and Joyce's Typescript"; Michael Groden, "'Cyclops' in Progress, 1919";

Hutchins, James Joyce's World, pp.239-43; Phillip F. Herring, "Some Corrections and Additions to Norman Silverstein's 'Magic on the Notesheets of the Circe Episode'"; Joyce, Joyce's 'Ulysses' Notesheets in the British Museum, ed. Herring; Litz, "Joyce's Notes for the Last Episode of Ulysses"; Prescott, Exploring James Joyce, Chaps.vi and vii; Myron Schwartzman, "The V.A.8 Copybook: An Early Draft of the 'Cyclops' Chapter of Ulysses with Notes on Its Development"; Senn, "Some Further Notes on Giacomo Joyce"; Norman Silverstein, "Evolution of the Nighttown Setting," in The Celtic Master: Contributions to the First James Joyce Symposium Held in Dublin, 1967, ed. Maurice Harmon.

For the composition of A Portrait of the Artist as a Young Man, see: Connolly, "Stephen Hero Revisited"; Hutchins, James Joyce's World, pp.233-34; Joyce, "The First Version of Joyce's Portrait," ed. Richard M. Kain and Robert E. Scholes; Magalaner, Time of Apprenticeship: The Fiction of Young James Joyce, pp.97-115; Scholes and Kain, eds. and comps., The Workshop of Daedalus: James Joyce and the Raw Materials for 'A Portrait of the Artist as a Young Man'; Senn, "Some Further Notes on Giacomo Joyce." For drafts and composition of Dubliners, see Magalaner, Time of Apprenticeship, pp.72-96.

[135] Sullivan, ed., p.9.

[136] Ibid., p.24; Henry, ed., The Book of Kells, pp.154-55, 211-12.

[137] Letters, I, 253, 20 May 1927; also quoted in Ellmann, JJ, p. 604. See also Letters, I, 254, to Weaver, 31 May 1927, and I, 288, to Weaver, 22 November 1929; Ellmann quotes passages from these two letters and comments upon them (JJ, pp.604-06, 632). Atherton remarks on the unfinished condition of the Kells MS and quotes a different portion than I have of Sullivan's comments upon this fact (Books at the Wake, p. 64). Richard J. Finneran thinks that Joyce's plan to have Stephens complete his work was serious, and he traces the relationship between the two ("James Joyce and James Stephens: The Record of a Friendship with Unpublished Letters from Joyce to Stephens").

[138] John Healy quotes Columba as asking Baithen "to write the rest" (Insula Sanctorum et Doctorum; or, Ireland's Ancient Schools and Scholars, p.304).

[139] Atherton, Books at the Wake, p.63. His authority is Sullivan's Introduction to the 2nd ed. (1920), p.7; see pp.2-3 of the 1st ed. (1914).

[140] Insula Sanctorum et Doctorum, p.309.

[141] Campbell and Robinson remark the presence of Columba on FW,409 (Skeleton Key, p.261 and n.8). Broes finds Columba at FW,60.08, 105.32, 324.26 ("More People at the Wake [Contd.]," p.25). Glasheen earlier listed him at 50.09-.10, 120.02, 122.26, 347.21, 409.27-.28, 484.32, 496.30, 615.02-.03 (Second Census, s.v. "Columba").

[142] Books at the Wake, p.64. He quotes Sullivan as describing "a space left vacant when the original artist had touched the Manuscript for the last time, [sic] I think, too, that we can almost see from the illumination itself the very place where he was hurried from his work

. . . The interruption of so very simple a feature of the work seems to tell a tale of perhaps even tragic significance" (2nd ed., p.11). This passage, with a period instead of a comma after "time," occurs on p.8 of the 1st ed.

[143] Glasheen finds Finnian at FW,372.29 (Second Census, s.v. "Finian").

[144] Rev. H. J. Lawlor, "The Cathach of St. Columba," pp.292-93, 309, 315-16. See also: Sullivan, ed., p.2; Healy, Insula Sanctorum et Doctorum, pp.310-11; W. Douglas Simpson, The Historical Saint Columba, p.6.

[145] See the account of Kevin's retreat to Glendalough in Healy, Insula Sanctorum et Doctorum, pp.414-22. In "Luggelaw," Glasheen notes that Kevin retreated to Luggelaw (see FW,203.17), pursued by Cathleen; when he fled to Glendalough, she drowned. Ellmann compares Kevin to Yeats (Yeats and Joyce, p.453).

[146] Hart shows how the tub theme is connected to the story of "The Sleeper Awakened" in the Thousand and One Nights (Structure and Motif, pp.104-07).

[147] Tindall, A Reader's Guide to 'Finnegans Wake', pp.313-14; Dalton, "Advertisement for the Restoration," in Twelve and a Tilly, ed. Dalton and Hart, especially p.119. See also Philip B. Sullivan, "Mr. Dalton, St. Kevin, and the Latin Language," pp.235-36.

[148] "Notes on the Art and Ornament of the Book of Kells," in Evangeliorum Quattuor Codex Cenannensis, III, 27; Solomon, Eternal Geomater, p.62. As Solomon notes, Atherton glosses these passages; he interprets "French leaves" as "obscene pages" (Books at the Wake, p.63).

[149] See Sigmund Freud, Chap.vi, "The Dream-Work," of The Interpretation of Dreams, in The Standard Edition of the Complete Psychological Works of Sigmund Freud, IV, 277-338, and V, 339-508; for a summary of his position, see V, 505-08. But cf. V, 526: "the state of sleep makes the formation of dreams possible because it reduces the power of the endopsychic censorship."

[150] Sullivan, ed., Plate XI. Excellent colour reproductions of the page can also be found in Evangeliorum Quattuor Codex Cenannensis, I; and in Henry, ed., The Book of Kells, Plate 47. For black and white reproductions, see: Joseph Campbell, Occidental Mythology, in The Masks of God, III, 468, Fig.30; and Solomon, Eternal Geomater, Frontispiece.

[151] Books at the Wake, p.66.

[152] Campbell, Occidental Mythology, in The Masks of God, III, 467.

[153] Meyer, "Notes on the Art and Ornament of the Book of Kells," in Evangeliorum Quattuor Codex Cenannensis, III, 38-39.

[154] I employ Meyers' terminology, for which see ibid., p.43.

[155] For discussions of ornamentation, see: ibid., pp.25-52; Sullivan, ed., *The Book of Kells*, pp.26-34; Henry, ed., *The Book of Kells*, pp.163-82; David Diringer, *The Illuminated Book: Its History and Production*, p.179.

[156] Diringer, *The Illuminated Book*, p.184.

[157] *The Book of Kells*, p.28. Murphy also attributes the phrase "diapered window margin" to Sullivan (1925 ed.), p.53; he also suggests "that Joyce uses 'stands dejectedly' as a parallel to 'fret' in the verbal sense of that word" ("More from the Book of Kells").

[158] *The Book of Kells*, p.15.

[159] *Illuminated Manuscripts*, p.78.

[160] *The Illuminated Book*, p.179.

[161] *The Book of Kells*, p.26.

[162] Ibid., p.27; he quotes as authority Johann A. Brunn, *An Enquiry into the Art of the Illuminated MSS. of the Middle Ages* (Stockholm, 1897).

[163] *Irish Art in the Early Christian Period (to 800 A.D.)*, p.205. On the spiral in the Kells, Durrow, and Lindisfarne MSS., see Meyer, "Notes on the Art and Ornament of the Book of Kells," in *Evangeliorum Quattuor Codex Cènannensis*, III, 34.

[164] *Irish Art in the Early Christian Period (to 800 A.D.)*, p.205.

[165] *The Book of Kells*, pp.30-31. Atherton quotes part of this remark from the 2nd ed. (1920), p.42; he also suggests that "Apep and Uachet! Holy snakes" (494.15), which refers to snake deities in *The Book of the Dead*, appears because of Sullivan's remark (*Books at the Wake*, pp.64-65). See also Murphy, "More from the Book of Kells."

[166] I believe that Campbell and Robinson were the first to make this connection (*Skeleton Key*, p.104). See also: Atherton, *Books at the Wake*, p.66; Solomon, *Eternal Geomater*, p.100.

[167] According to Arthur Edward Waite, "the Cross was typically that of Calvary, from the days of Robert Fludd, and the Rose was the Rose of Sharon"; Christ is "the Hidden Master of the Rosy Cross," and the desired end of initiation is the alchemy of the spirit (*The Brotherhood of the Rosy Cross: Being Records of the House of the Holy Spirit in Its Inward and Outward History*, pp.626, 628; see also pp.110-11). The two central documents of Rosicrucianism, *Fama Fraternitatis . . .* (Cassell, 1614) and *Confessio Fraternitatis . . .* (Cassell, 1615), are reprinted from the English translation published by Thomas Vaughan in 1652, with some changes in orthography and punctuation, in Frances A. Yates, *The Rosicrucian Enlightenment*, pp.238-51 and 251-60, respectively. For the connection of Rosicrucianism to the Order of the Golden Dawn, see: Israel Regardie, *My Rosicrucian Adventure: A Contribution to a Recent Phase of*

the History of Magic, and a Study in the Technique of Theurgy; and Francis King, *The Rites of Modern Occult Magic*, especially Appendix G, "The Golden Dawn's Official History Lecture" (1891?), pp.212-17; according to this Lecture, the origin of the Golden Dawn can be traced to "the Fratres Rosae Crucis of Germany, which association was founded by one Christian Rosenkreutz about 1398" (King, p.213). M. MacGregor Mathers writes that the symbols of the Rose and the Lily or Lotus and of the Cross are found in all sacred books; the Rose and the Lily are symbols of "the infinite and harmonious separations of nature," while the secret of the Cross is in finding its centre (Preface [ca.1926] to the new ed. of S. L. MacGregor Mathers, trans. and ed., *The Kabbalah Unveiled; Containing the Following Books of the Zohar: The Book of Concealed Assembly, The Greater Holy Assembly, The Lesser Holy Assembly*, pp.ix-x).

[168] Waite, *Brotherhood of the Rosy Cross*, p.112. Heraldry and Rosicrucianism are mentioned in close proximity at *FW*,99.27-.31; see Waite, p.103 for the relation.

[169] Why Joyce associates Rosicrucianism with Russia in the last two passages cited is puzzling. Nothing Waite says offers a clue (ibid., Chap.xix, "The Rosy Cross in Russia," pp.529-47).

[170] For an explication of this alchemical passage, see my unpublished Master's thesis, "The Alchemists at *Finnegans Wake*" (Alberta, 1970), pp.4-12. Working as I did from Jung's studies of alchemy and from John Read, *Prelude to Chemistry: An Outline of Alchemy, Its Literature and Relationships*, MacArthur comes to some of the same conclusions I had earlier reached ("Alchemical Elements of *FW*" [1975]).

[171] *Books at the Wake*, p.65. However, the *T* is, among other things, also Eremon's queen, Tea; for Tea, see George Brandon Saul, *Traditional Irish Literature and Its Backgrounds: A Brief Introduction*, p.17. One might also want to associate *T* with the *T*-figure in Ramon Lull's *Ars Demonstrativa*, for which see Yates, "Ramon Lull and John Scotus Erigena," p.19.

[172] Petr Skrabanek, "Imaginable Itinerary Through The Particular Universal (260.R3)."

[173] *Eternal Geomater*, pp.59-60.

[174] Solomon interprets this phrase as one of the many references to masturbation in II.1 (ibid., p.22). I believe that there may be an alchemical meaning in "three of clubs." In the alchemical illustration known as the "Great Allegory about Macrocosm and Microcosm, signed: 'M. Merian fecit,'" from *Musaeum Hermeticum* (Frankfurt, 1625), there are opposing sides - masculine and feminine, *Phoenix* and *Aquila*, fire and water, fire-air and water-earth, sun and moon, lion and stag-headed man - which combine in a *coincidentia oppositorum* to form the philosophers' stone. The stag-headed man bears a shamrock or three-leaf clover, like Shem's "three of clubs," and like Shem, who is associated with A.L.P., this man stands on the female side of the illustration and helps a woman support the moon. The illustration is reproduced as Fig.54 in Helena Maria Elisabeth de Jong, *Michael Maier's 'Atalanta Fugiens':*

Sources of an Alchemical Book of Emblems.

[175] Rev. George Oliver, The Historical Landmarks and Other Evidences of Freemasonry, Explained, II, 623.

[176] The Book of Kells, p.14; Occidental Mythology, in The Masks of God, III, 467.

[177] Atherton uses the term "St. Andrew's cross" to describe the shape of the letters in the quincunx and suggests that "this with 'lines of litters slittering up and louds of letters [sic] sletttering down' (114.17), gives yet another parallel with the Finnegans Wake MS" (Books at the Wake, pp.65-66); in the edition of Finnegans Wake which I use throughout this study (New York: The Viking Press, A Viking Compass Book, 1959; 15th printing 1974), what Atherton transcribes as "letters" reads "latters."

[178] The Book of Kells, p.13. Murphy also makes this identification ("More from the Book of Kells").

[179] Most of the signs which Joyce used to indicate his characters while writing Finnegans Wake are identified in Letters, I, 213, to Harriet Shaw Weaver, 24 March 1924. There, ᗰ = Earwicker, "HCE by moving letter round"; Δ = Anna Livia; ⊏ = Shem-Cain; Λ = Shaun; Σ = Snake; P = S. Patrick; T = Tristan; ⊥ = Isold; X = Mamalujo; □ = the title of the book, "but I do not wish to say it yet until the book has written more of itself." Most of these signs appear as the "Doodles family" (299.F4) in Finnegans Wake. See also Letters, I, 216, to Weaver, 27 June 1924; I, 279, to Weaver, 27 May 1929, and 279, n.1 (in which the editor, Gilbert, identifies O as the sign for Beckett et al., Our Exagmination Round His Factification for Incamination of Work in Progress); and III, 147, to Weaver, 29 November 1926 (in which Joyce signs himself ⊏, that is, as Shem). Tindall also lists the signs and the corresponding characters (A Reader's Guide to 'Finnegans Wake', p.185). MacArthur applies Joyce's phrase "HCE by moving letter round" to the "trilithon sign ᗰ" (119.17); if the sign is rotated, he says, the result is ⊞, which contains H, C, and E, and which is also a mandala of psychic energy ("The Shadow of HCE," p.63). Richard Motycka suggests a relationship between the signs and the Cabbala ("A Little Night Lesson: Viconian Structure in FW II.2," p.87, n.1). Staples reproduces a chart entitled "Ancient Greek musical symbols"; some of the symbols in this chart correspond to Joyce's signs ("The Doodles Family"). See also: Adams, James Joyce: Common Sense and Beyond, pp.180-81, 184; Burgess, Joysprick, pp.19-20; McHugh, "Direct References to Sigla"; and Rose, "Not for Pie."

[180] Books at the Wake, p.65. Darcy O'Brien identifies the point π in Joyce's Diagram with A.L.P.'s navel and the point P with her vagina; he says that the Diagram is the large buttocks of a woman covered by a small maid's apron (The Conscience of James Joyce, p.229).

[181] Eternal Geomater, p.63; the quoted passage she incorrectly cites as FW,284.22-.28. It should be kept in mind that A.L.P. is associated with "Tea"; see the section entitled "A.L.P., Gaea the Earth Mother, and Molly Bloom" in Chapter Five of the present study.

182 Reader's Guide to 'Finnegans Wake', p.125

183 John Read, Prelude to Chemistry, p.54; this is the second of twelve axioms, which Read gives in their entirety. Titus Burckhardt also supplies the entire document, along with a cogent discussion (Alchemy: Science of the Cosmos, Science of the Soul, pp.196-201). For a discussion of FW,263.21-.23, and other references to Hermes Trismegistus, see my Master's thesis, "The Alchemists at Finnegans Wake," pp.61-69. Joyce may have read of the Emerald Tablet of Hermes and the maxim "the things below are as the things above" in Yeats's essay "Symbolism in Painting" (1898) (Essays and Introductions, p.146). See also Tindall, "James Joyce and the Hermetic Tradition," p.34.

184 Sir Edward Sullivan says that the triangle is symbolic of the Trinity and of Christianity in general and is used only in association with holy personages in The Book of Kells; "its occurrence may therefore be taken to indicate a badge of association with Christ and His teaching: its absence to denote an anti-Christian attitude" (The Book of Kells, p. 22).

185 Norman O. Brown writes of the time when "civilization has to be renewed by the discovery of new mysteries, by the undemocratic but sovereign power of the imagination" (Closing Time, p.30).

186 James Joyce and the Making of 'Ulysses', p.191; the passage is also quoted in Hart, Structure and Motif, p.141, from Budgen.

187 Mel Seesholtz compares this motif to the children's game "Mother, Mother, The Pot Boils Over," hence, to the magic pot, and also to Ibsenian beeftea ("Yes, If You Won't Spit on T'Hearth," p.24). For the magic pot, see Chapter Five of the present work. In the "Circe" episode, Susy Dignam says, "Mamma, the beeftea is fizzing over!" (U,568).

188 Yeats, p.226.

189 Shaun boasts, "I'd burn the books that grieve you and light an allasundrian bompyre that would suffragate Tome Plyfire or Zolfanerole" (439.34-.35). Playfair was the commander absent from the Magazine at the beginning of the Easter Rebellion; his young son was executed by the patriots.

190 Structure and Motif, pp.67-69. Frances M. Boldereff associates H.C.E. and A.L.P. with the man and the woman of "The Mental Traveller" (Reading 'Finnegans Wake', pp.69, 83). She also opines that Joyce's Diagram is "very closely related to the diagram from the Second Book of Milton by William Blake and also summarises the symbolism which Yeats has employed in A Vision" (ibid., p.139); I cannot see the connection with Blake's diagram. In "Yeats's Debt to William Blake," Kathleen Raine traces the pattern of the male-female reversal back to Plato; "the source of the structure of 'A Mental Traveller' [sic] is Plato's myth of the Great Year, as told in the Laws. The god Saturn (ruler of the Golden Age) at one time conducts the world and its revolutions, at another relinquishes it, leaving it to unwind its gyrations like a coiled spring released. In the reign of Saturn, the myth says, men do not grow, as now, from youth

to age, but from age to youth, as does Blake's babe. The slaying of the god Dionysus was associated, in his cult, with the beginning of a new cycle" (Defending Ancient Springs, p.81). For Joyce and Blake, see n.89 of the present chapter.

[191] A Vision (1925), p.13. See FW,293.02-.05 for a reference to the Shiftings, which is described in A Vision, p.229.

[192] "A Packet for Ezra Pound," in A Vision (1937), pp.28-29.

[193] Glasheen also makes this identification ("The Yeats Letters and FW"). For the foundation of the Dublin Hermetic Society and of the Order of the Golden Dawn, see: Yeats, Autobiographies, pp.90-92, 575-76; Waite, Brotherhood of the Rosy Cross, pp.568-84; M. MacGregor Mathers' Preface to S. L. MacGregor Mathers, trans. and ed., The Kabbalah Unveiled; John Senior, The Way Down and Out: The Occult in Symbolist Literature, pp.154-56; Ellmann, Yeats: The Man and the Masks, pp.41-57, 89-101; Ellic Howe, The Magicians of the Golden Dawn: A Documentary History of a Magical Order 1887-1923; King, Rites of Modern Occult Magic; and Raine, Yeats, The Tarot and the Golden Dawn.

[194] Harbans Rai Bachchan, W. B. Yeats and Occultism: A Study of His Works in Relation to Indian Lore, the Cabbala, Swedenborg, Boehme, and Theosophy, p.246; see also T. R. Henn, "The Accent of Yeats' 'Last Poems,'" p.60. Bachchan notes that Vico discusses Leo and Virgo (p.251). According to Vico, "in the belt of the zodiac which girds the celestial globe the two signs of Leo and Virgo, more than the others, appear in majesty, or, as is said, in perspective. The former signifies that our Science in its beginnings contemplates first the Hercules that every gentile nation boasts as its founder, and that it contemplates him in his greatest labor. . . . The second sign, that of the Virgin, whom the astronomers found described by the poets as crowned with ears of grain, signifies that Greek history began with the golden age." For Vico, the lion signifies the primeval forest razed by Hercules; it is also to be associated with the beginnings of time-reckoning, that is, with the Olympiads, which were based on Hercules' Nemean games. Vico associates Virgo with Saturn, whose name is derived from L. sati ("sown") (The New Science of Giambattista Vico, p.4 [par.3]). For Joyce and Theosophy, see: Atherton, Books at the Wake, pp.253, 280; Hart, Structure and Motif, pp. 49-50; and Gordon Ames Lameyer's rather uneven dissertation, "The Automystic and the Cultic Twalette: Spiritual and Spiritualistic Concerns in the Works of James Joyce." Stanislaus Joyce testifies that Joyce, his interest awakened by Yeats and Russell, toyed with Theosophy as "a kind of interim religion"; he is said to have read Blavatsky, Olcott, Besant, and Leadbeater (My Brother's Keeper, p.140).

[195] Melchiori, The Whole Mystery of Art, pp.258-59. In Book I, "Four Years, 1887-1891," of The Trembling of the Veil (1922), Yeats himself writes that Mathers gave to one of his students "a piece of cardboard on which was a coloured geometrical symbol and had told her to hold it to her forehead and she had found herself walking upon a cliff above the sea, seagulls shrieking overhead" (Autobiographies, p.185). Hodgart says that Mathers is named at several places in Finnegans Wake, but he does not supply the locations ("Music and the Mime of Mick, Nick, and the

Maggies/ Book II, chapter 1," in *A Conceptual Guide to 'Finnegans Wake'*, ed. Begnal and Senn, p.85). Glasheen, perhaps with too much enthusiasm, finds Mathers at *FW*,288.08 and 422.05 ("The Yeats Letters and *FW*").

[196] Mathers, p.75 and Plate IX, Fig.41.

[197] *Magick in Theory and Practice*, pp.382-84. For Crowley's life, see: his *The Confessions of Aleister Crowley*; and John Symonds, *The Great Beast: The Life and Magick of Aleister Crowley*. For his relation to Yeats and the Golden Dawn, see: Howe, *The Magicians of the Golden Dawn*; King, *The Rites of Modern Occult Magic*; and Raine, *Yeats, The Tarot and the Golden Dawn*. According to Raine (pp.33-35), some of the images from Yeats's "The Resurrection" (1931) may be taken from Crowley's poem "Liber Legis," published in *The Equinox*, 1909-13. For a summary of Crowley's magical system, see Regardie, *The Tree of Life: A Study in Magic*.

[198] "Music and the Mime of Mick, Nick, and the Maggies/ Book II, chapter 1," p.85. Philip B. Sullivan thinks that "*From* *Abbeygate* *to* *Crowalley* *Through* *a* *Lift* *in* *the* *Lude*" (105.26-.27; Joyce's emphasis) refers to Crowley and the Sicilian abbey in which he resided in the twenties ("The Beast").

[199] "The Yeats Letters and *FW*"; she cites Yeats, *Letters*, ed. Wade (New York, 1955), pp.208-09, n.3.

[200] For the negative view, see Ellmann, *Eminent Domain*, p.51. In another place, Ellmann writes that John V. Kelleher describes the Diagram in Joyce as a parody of the diagrams in *A Vision* (*JJ*, p.608, n.); unfortunately, he does not provide bibliographical details, and I have been unsuccessful in finding Kelleher's observation in those articles by him to which I have had access, namely, "Joyce Digested" and "The Perceptions of James Joyce" (for the titles of other articles by Kelleher, see Robert H. Deming, *A Bibliography of James Joyce Studies*). Ellmann seems to be at odds with himself concerning the editions of *A Vision* which Joyce knew. In his biography of Joyce, he says that Joyce was aware of the "attack" made upon him by Yeats in the 1st ed. (1925) of *A Vision* (*JJ*, p.608, n.), but in later books, he states that Joyce could only have known the 2nd ed. (1937) (*Eminent Domain*, p.51; *Yeats and Joyce*, pp.471-72). According to Connolly, the only edition of *A Vision* in Joyce's "Personal Library" in Paris at the end of the thirties was the 2nd (*The Personal Library of James Joyce: A Descriptive Bibliography*, Item 315, p.42). Hart relies on the authority of Ellmann (*JJ*, p.608, n.) and Connolly and writes that "Joyce read *A Vision* in both the first and second (revised) editions, published in 1926 [sic] and 1937 respectively" (*Structure and Motif*, p.66, n.1). M. J. Sidnell quotes and disagrees with Ellmann's statement in *Eminent Domain* that Joyce did not know the 1st ed. of *A Vision*; he says that Joyce's Diagram *is* a parody of Yeats's cones and observes that Joyce could have found the diagram of the cones in the notes to *Michael Robartes and the Dancer* (1921) (Sidnell, "A Daintical pair of accomplasses: Joyce and Yeats," in *Litters from Aloft: Papers Delivered at the Second Canadian James Joyce Seminar, McMaster University*, ed. Ronald Bates and Harry J. Pollock, p.70). Boldereff writes that the symbol from *Stories of Michael*

Robartes, which depicts the Great Wheel of the Ancients with its twenty-eight phases, is a structural diagram of *Finnegans Wake*; she claims that *Finnegans Wake* is an elaboration of *A Vision* and explicates the Diagram according to Yeatsian principles (*Reading 'Finnegans Wake'*, pp.63, 138-48; see also her *Hermes to His Son Thoth: Being Joyce's Use of Giordano Bruno in 'Finnegans Wake'*, p.208).

[201] *A Vision* (1937), p.75.

[202] Ibid., pp.187, 198.

[203] Ibid., p.187.

[204] Ibid., pp.199-200.

[205] Ibid., p.262. Boldereff suggests that Joyce's word "apexojesus" (296.10) refers to *A Vision* and then quotes this passage (*Reading 'Finnegans Wake'*, pp.142-43). Lewis Phillips attempts to show (unsuccessfully, in my opinion) that "apexojesus" means that Jesus replaces God the Father at the top of the upper triangle in the Diagram, just as Shaun replaces H.C.E. ("How to Teach Geometry and Theology Simultaneously").

[206] *A Vision* (1937), p.91; italicized in the original. Atherton identifies "creactive mind" (300.20-.21) with Creative Mind and "booty of fight" (300.22) with Body of Fate, but overlooks "mass" (300.21) for Mask; he does not make the connection with the "Rules for Discovering True and False Masks." Instead, he identifies *FW*,300.20-.22 with the *Timaeus* (39), saying, "this is quoted by Yeats in a passage in *A Vision* ('Creative Mind,' pp.68 et seq.) which is also being quoted here" (*Books at the Wake*, pp.290, 273). Sidnell says of *FW*,300.20-.22 that Joyce is parodying "key terms from *A Vision* ('creative mind,' 'body of fate'). Joyce distinguishes between the Yeats who 'by the halp of his creactive mind offered to deleberate the mass from the booty of fight' . . . i.e., the Yeats who shows in his reactionary energetic, pagan creativity the way to release from the cycles of existence - or something like that - from 'our Same' (Shem or Joyce) who by more ordinary means sought to deliver us from or elaborate the mess of the corrupt world with his corrective mind - that or its contrary: 'our Same with the help of bounty of food sought to delubberate the mess from his corructive mind'" ("A Daintical pair of accomplasses: Joyce and Yeats," in *Litters from Aloft*, pp.69-70). There may be something to this gloss, although if the Same is Shaun, as Hart establishes (see main text, below), why would Joyce-Shem associate himself with it? As perceptive as Sidnell's article is, it does not give the connection between *FW*,300.20-.28 and Yeats's "Rules for Discovering True and False Masks." Ussher calls Joyce Ireland's first great native writer; in order for him to have attained this distinction, he had "to achieve a great collective Yeatsian 'dreaming back'" (*Three Great Irishmen*, p.127).

[207] *A Vision* (1937), p.251.

[208] Hart, *Structure and Motif*, p.133. See also Tindall, *Reader's Guide to 'Finnegans Wake'*, pp.319-21.

[209] *A Vision* (1937), p.67.

[210] Solomon thinks that in *FW*,122.31-.32, the figure on the *Tunc* page which she calls A.L.P.'s quincunx is referred to as a kiss. She also associates *FW*,122.20-.22 with the *T* of the *Tunc* page and *FW*,114.17-.18 with the *X*, which is also the kiss from A.L.P.'s lips on the last page of the book (*Eternal Geomater*, p.100). I am not certain I agree that the *T* is the "cruciform postscript" (122.20), as she says, because a postscript is at the bottom of a page, while the *T* in the *Tunc* page is at the top. Nevertheless, there is definitely a *T* in the postscript to that version of the Letter at *FW*,111.16-.20. Campbell and Robinson suggest a cabbalistic meaning for the schoolboy sketch in the lower left margin of *FW*,308 and relate the sketch to the Crucifixion, kisses, and *The Book of Kells* (*Skeleton Key*, p.195, n.72); Atherton quotes and agrees with them (*Books at the Wake*, p.66).

[211] Ellmann, *JJ*, p.463.

[212] For comprehensive description and history of the horn-book, see: Andrew W. Tuer, *History of the Horn Book*; Beulah Folmsbee, *A Little History of the Horn-book*; and George A. Plimpton, "Horn Books."

[213] For discussion of this woodcut, see: Plimpton, "Horn Books," p.265; and Dr. John Ferguson, "The *Margarita Philosophica* of Gregorius Reisch: A Bibliography," p.197; a reproduction of the woodcut is given by Plimpton. For bibliographical details of the *Margarita Philosophica*, see: Ferguson; and Robert Collison, *Encyclopaedias, Their History throughout the Ages: A Bibliographical Guide with Extensive Historical Notes to the Present Day*, pp.74-75. For a summary of Reisch's position on astrology (pro) and alchemy (con), see Lynn Thorndike, *A History of Magic and Experimental Science*, V, 139-41. For a comprehensive study of Reisch and his work, see Robert Ritter von Srbik, "Die *Margarita Philosophica* des Gregor Reisch (†1525): Ein Beitrag zur Geschichte der Naturwissenschaften in Deutschland." There is some disagreement over the date of the 1st ed.; I have followed Ferguson and Thorndike.

[214] Tuer, *History of the Horn Book*, p.89; Folmsbee, *A Little History of the Horn-book*, p.20.

[215] *Eternal Geomater*, p.100.

[216] *Structure and Motif*, p.205. Dounia Bunis Christiani remarks that her research "disclosed the *Interibo* [sic] *ad altare Dei* to be the homosexual entry in several instances, rather than an osculation of the Devil's behind"; she finds more profound blasphemy at *FW*,455.35, 449.30-.33, and 509.33 ("The Polyglot Poetry of *Finnegans Wake*," in *James Joyce: His Place in World Literature*, ed. Wolodymyr T. Zyla, p.29). For the term *osculum infame*, see Pennethorne Hughes, *Witchcraft*, p.136; for further examples of the theme, see Margaret Alice Murray, *The Witch-Cult in Western Europe: A Study in Anthropology*, pp.127-30.

[217] As Hart points out, variants of the motif are at *FW*,210.06, 313.13, 375.15, and 445.07 (*Structure and Motif*, p.229).

[218] Emile Angelo Grillot de Givry, Witchcraft, Magic, and Alchemy, p.68.

[219] Transcendental Magic: Its Doctrine and Ritual, Fig.IX, p.187. Gilbert reports that he discussed Lévi's theories of magic with Joyce (Preface to the 1952 ed., James Joyce's 'Ulysses' [1963; rpt. Harmondsworth, Middlesex: Penguin Books, in association with Faber and Faber, A Peregrine Book, 1969], p.9). Gilbert also quotes Lévi's idea that "'nothing . . . is indifferent in Nature; a pebble more or less upon a road may crush or profoundly alter the fortunes of the greatest men and even of the greatest empires; much more, then, the position of a particular star cannot be indifferent to the destinies of the child who is being born, and who enters by the fact of his birth into the universal harmony of the sidereal world.' This dictum is quoted not to justify the pretensions of astrologists but to illustrate the extreme view of certain occult thinkers respecting so-called 'accidents'" (p.52).

[220] Joyce's 'Ulysses' Notesheets in the British Museum, ed. Herring, p.122, lines 96-97; Herring has no comment.

[221] Transcendental Magic, p.12. For the formula solve et coagula, see Jung, Aion: Researches into the Phenomonology of the Self, in The Collected Works, IX.2, 260; and elsewhere in his works. For a concise discussion of Jung's views on alchemy, with a bibliography, see Mircea Eliade, Note N, "C. G. Jung and Alchemy," in The Forge and the Crucible, pp.221-26.

[222] In the "Circe" episode, Alexander J. Dowie calls Leopold Bloom the "stinking goat of Mendes" (U,492). Further evidence of Joyce's awareness of the diabolic associations of the goat is given by Budgen, with whom Joyce agreed that goats were admirable for their courage and curiosity and "said he couldn't see why the goat had been selected as a satanic symbol" ("Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', p.357). According to Hodgart, all the Tarot suits are named in Finnegans Wake, as well as most of the Trumps Major ("Music and the Mime of Mick, Nick, and the Maggies/ Book II, chapter i," in A Conceptual Guide to 'Finnegans Wake', ed. Begnal and Senn, pp.85-86). See also Thornton Wilder, "Giordano Bruno's Last Meal in Finnegans Wake," pp.1, 3-4. Dalton replies to Wilder in "Note," AWN, OS, No.7 (Nov. 1962), pp.7-9. Replying to Dalton, Staley points out that the Hanged Man in Waite's The Pictorial Key to the Tarot: Being Fragments of a Secret Tradition under the Veil of Divination resembles the corresponding figure in the works of Sir James G. Frazer ("Tarot"). Answering Staley's reply, Dalton reports that he has read Waite ("Correspondence").

[223] Transcendental Magic, pp.307-09; Lévi's emphasis.

[224] Hodgart agrees with this identification ("Music and the Mime of Mick, Nick, and the Maggies/ Book II, chapter i," p.85); I cannot assent to his proposal that Lévi is alluded to at FW,230.34.

[225] Senn, "A Test-case of Over-reading," p.4. For what Lévi entitles "The Nuctemoron of Apollonius of Tyana," see Transcendental Magic, pp.

415-23; this short tract recounts the twelve hours, with the corresponding genii, of initiation into magic. A propos of Solomon's observation that the number three is associated in Finnegans Wake with the male genitals (Eternal Geomater, pp.59-60), in what Lévi entitles "The Nuctemoron According to the Hebrews," which is an extract from the Mishnah, the number three is said to be represented by "the generative organ, which is composed of one and two, emblem of the triadic number" (Transcendental Magic, p.425).

[226] Sullivan, ed. p.7; Atherton has drawn attention to Sullivan's remark in this connection and quotes it from the 2nd ed. (1920), p.9 (Books at the Wake, p.65). I can find no reference to the left feet in Finnegans Wake.

[227] The Black Mass in Ulysses has aroused considerable critical interest. Gilbert writes that "obviously, to the complete unbeliever, a Black Mass would seem as meaningless and tedious as the Holy Eucharist. His treatment of the Black Mass in the episode of 'Circe' makes it plain that this was not the case with Joyce, who, as I often felt on the rare occasions when our conversation turned on such subjects, was indelibly imbued with the religious sense." And he adds that "no doubt certain passages in Ulysses are blasphemous. Yet, much as hypocrisy is the tribute vice pays to virtue, so blasphemy implies a recognition of the divine object named, 'taken in vain,' and challenged. And perhaps, as Renan said, 'le blasphème des grands esprits est plus agréable à Dieu que la prière intéressée de l'homme vulgaire'" ("James Joyce," in James Joyce: Two Decades of Criticism. ed. Givens, pp.461, 462; Gilbert's emphasis). Adams thinks that Blake is associated with the Black Mass in order to strengthen Stephen's rebellion against authority; the Black Mass is "a major effort on Stephen's part to see and reject the whole established structure of civilization as it presses in on him" (James Joyce: Common Sense and Beyond, p.159). Adams also says that by the Rev. Mr. Hugh C. Haines Love (hate-love) Joyce means to gain revenge on the Belfast landlord by that name who dispossessed the Joyce family in 1900 (ibid., p.160; and Surface and Symbol, pp.29-35); I agree with Adams, but I would go further, and say that Joyce means the naming as an act of black magic. W. P. Fitzpatrick and Patrick A. McCarthy concur that the Black Mass realizes Stephen's attempt to gain artistic freedom ("The Myth of Creation: Joyce, Jung, and Ulysses," p.130; "Further Notes on the Mass in Ulysses"). A. M. Klein partially succeeds in tracing the Black Mass in "Telemachus"; he also tries to establish the fact that the date of Ulysses is compatible with the principles which determine the date of a Black Mass ("The Black Panther [A Study in Technique]"). Paul L. Briand, Jr., speculates that the Mass proper is a basic structure of the book ("The Catholic Mass in James Joyce's Ulysses"), but both Patrick A. McCarthy and Ruth M. Walsh argue against his strict approach ("Further Notes on the Mass in Ulysses"; "In the Name of the Father and of the Son . . . Joyce's Use of the Mass in Ulysses"); Walsh also summarizes all critics on the subject prior to 1969 (see also her "That Pervasive Mass - In Dubliners and A Portrait of the Artist as a Young Man," p.209). Brewster Ghiselin draws a parallel between Nannie in "The Sisters" and the celebrant of the Black Mass in "Circe" ("The Unity of Joyce's Dubliners," pp.196-97). Brennan comments on the demonic in Joyce (Three Philosophical Novelists, pp.27-30). See also: Boyle, "The

Priesthoods of Stephen and Buck," in Approaches to 'Ulysses': Ten Essays, ed. Staley and Benstock, and "Penelope," in James Joyce's 'Ulysses': Critical Essays, ed. Hart and Hayman, pp.425-27; Hodgart, "Music and the Mime of Mick, Nick, and the Maggies/ Book II, chapter 1," pp.84-85.

[228] Alchemical Studies, in The Collected Works, XIII, 122.

[229] Pennethorne Hughes, Witchcraft, p.142.

[230] Thornton observes this change of gender (Allusions in 'Ulysses', s.v. "433.9/426.7").

[231] Ibid., s.v. "599.32/584.6." In a list of references to charms, omens, weather signs, and superstitions which Joyce made for the "Circe" episode is the note "charm said backwards"; reversal is associated with magic. This note has been crossed through, indicating that Joyce used it in Ulysses, and it has a B beside it, marking it as a motif connected with Bloom (Joyce's 'Ulysses' Notesheets in the British Museum, ed. Herring, p.308, line 47).

[232] A Reader's Guide to James Joyce, p.79; he also glosses "The bulldog of Aquin" (U,208) and "san Tommaso Mastino" (U,637) by observing that "Aquinas is a dog because he was a Dominican or, according to the mediaeval pun, Domini canis, dog of God. Nor yet a god or creator, Stephen, still a dog, aspires to the position of dog of God" (p.174, n.1). Adams concludes that Joyce did not begin with the God-dog relation, but discovered that it fit the Homeric framework (Surface and Symbol, pp. 107-16). See also: Budgen, James Joyce and the Making of 'Ulysses', pp. 53-54; Schutte, Joyce and Shakespeare, pp.99-101.

[233] Tindall cites these two examples (Reader's Guide to James Joyce, p.80, n.18). The phrase "dog in the manger" goes back to Aesop's fable concerning the dog which would not allow the ox to eat the straw. In Chap.xxix of Five Hundred Points of Good Husbandry (1557), Thomas Tusser writes, "To dog in the manger, some liken I could,/ That hay will eat none, nor let other that would" (Quoted in Frank N. Magill and Tench Francis Tilghman, eds., Magill's Quotations in Context, p.224). Discoursing on "Covetousness, a Cause," Robert Burton observes that "like a hog, or dog in the manger, he doth only keep it, because it shall do nobody else good, hurting himself and others" (The Anatomy of Melancholy, p.246 [I.2.3.12]). Although the "dog in the manger" metaphor is not used there, the same sense can be found in Matt. 23:13, "but woe unto you, scribes and Pharisees, hypocrites! for ye shut up the kingdom of heaven against men: for ye neither go in yourselves, neither suffer ye them that are entering to go in"; Benstock notes this biblical echo (Joyce-Again's Wake, p.31).

[234] Murray, The Witch-cult in Western Europe, p.135; Richard Leighton Greene, ed., A Selection of English Carols, p.18.

[235] Quoted in James Laver, The First Decadent, Being the Strange Life of J.-K. Huysmans, p.86; I am unable to locate this passage in the original Preface.

[236] Strong finds not blasphemy but merely incongruity in *Finnegans Wake* (*The Sacred River*, p.159). Atherton suggests that the parodies of the Mass in *Finnegans Wake* "are of such a flippant nature that it seems unlikely that Joyce is speaking for himself in making them"; he thinks that "the most irreverent travesties" are uttered by the Christian Shaun (*Books at the Wake*, p.187). Begnal observes that only Shaun cares much for religion, of the characters in the book, and he proposes that Joyce uses Shaun to scarify "the hypocritical ways in which faith is manipulated," rather than to pillorize religion itself (in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, p.49). On the other hand, Benstock argues convincingly that nothing else "but complete conscious blasphemy can be understood from Joyce's parodies of religious material, unless there exists a dual standard by which 'in-group' Catholics accept such desecration as the prerogative of the inner circle and practice an esoteric Catholicism denied to the ordinary Roman Catholic" (*Joyce-Again's Wake*, p.101; see pp.100-04).

[237] *The Complete Dublin Diary*, p.55, n.55.

[238] The question of Joyce's Catholicism is a complex issue. Perhaps it is best summed up by Harry Levin, who writes that Joyce "lost his faith, but he kept his categories" (*James Joyce: A Critical Introduction*, p.25). Ussher characterizes Joyce as Catholic in his breadth (*Three Great Irishmen*, p.129). Morse thinks of Joyce as a Catholic thinker defending the individual against the institution (*The Sympathetic Alien: James Joyce and Catholicism*, pp.3-4). Strong calls *Ulysses* "a great Catholic novel"; he states that although not always Catholic, Joyce was always a theologian, with the Church always in his mind (*The Sacred River*, pp. 11, 12). William T. Noon, S.J., acknowledges Joyce's hostility towards the Church, but says that it is modified by his interest in the liturgy, his respect for all religions and mythologies, and his belief in the necessity of a transcendent image; with each work, Noon claims, Joyce's hostility lessens ("The Religious Position of James Joyce," in *James Joyce: His Place in World Literature*, ed. Zyla). Stanley Sultan calls Joyce a "theocratic humanist" (*The Argument of 'Ulysses'*, pp.457-58). However, Stanislaus Joyce makes clear Joyce's alienation; he writes that his brother "has ceased to believe in Catholicism for many years" and that "Catholicism he has appreciated, rejected and opposed, and liked again when it had lost its power over him" (*The Complete Dublin Diary*, p.51, entry for 13 August 1904, and p.55). Hart thinks there is evidence that Joyce was not a Christian in any way (*James Joyce's 'Ulysses'*, p. 11). Benstock gives a comprehensive discussion of many critics on the subject (*Joyce-Again's Wake*, pp.68-107). For bibliographical details of material on Joyce, Christian theology, and the Bible, see Moseley, *Joyce and the Bible*, p.x. See also: Atherton, *Books at the Wake*, pp.184-90; Brennan, *Three Philosophical Novelists*, pp.23-27; Cixous, *Exile of James Joyce*, pp.637-45; Kenner, *Dublin's Joyce*, pp.346-53; Edward A. Kopper, Jr., "Some Additional Christian Allusions in the *Wake*"; Noon, *Joyce and Aquinas*; O'Brien, *Conscience of James Joyce*; Kevin Sullivan, *Joyce among the Jesuits*.

[239] Diogenes Laertius writes that "Plato had defined Man as an animal, biped and featherless, and was applauded. Diogenes plucked a fowl and brought it into the lecture-room with the words, 'Here is Plato's

man.' In consequence of which there was added to the definition, 'having broad nails'" (Lives of Eminent Philosophers, II, 43 [vi.40]).

[240] According to Kevin Sullivan, "the psychological impact of his [Joyce's] spiritual orientation during these early years [with the Jesuits] was never wholly lost on him, even after faith itself was lost" (Joyce among the Jesuits, p.8).

[241] According to Russell, "the first effect of emancipation from the Church was not to make men think rationally but to open their minds to every sort of antique nonsense" (A History of Western Philosophy [London, 1946], p.523; quoted in Atherton, Books at the Wake, p.46). In his essay "On Catholic and Protestant Skeptics" (1928), Russell observes that "many Catholic freethinkers . . . have always felt the need of a rigid faith and a directing church. Such men sometimes become Communists; of this Lenin was the supreme example. Lenin took over his faith from a Protestant freethinker (for Jews and Protestants are mentally indistinguishable), but his Byzantine antecedents compelled him to create a church as the visible embodiment of the faith" (Why I Am Not a Christian and Other Essays on Religion and Related Subjects, p.122). Attempting to ascertain why there was a revival of interest in the occult during the French Enlightenment, Christopher McIntosh writes that "the human mind abhors the absence of irrational belief just as nature abhors a vacuum. Thus, the intellectuals who had initiated the revolt against the Christian Church were, by the middle of the eighteenth century, already becoming tired of their own scepticism and were looking around for a new faith to replace the one they had abandoned" (Eliphas Lévi and the French Occult Revival, p.18).

[242] Joyce, p.159. Stanislaus is careful to preserve the sense that after his brother left the Church, he developed a sense not of superstition, but of detached idealism. He also remarks that "it has become a fashion with some of my brother's critics (among them his friend Italo Svevo) to represent him as a man pining for the ancient Church he had abandoned, and at a loss for moral support without the religion in which he was bred. Nothing could be further from the truth. I am convinced that there was never any crisis of belief. The vigour of life within him drove him out of the Church, that vigour of life that is packed into the seven hundred odd quarto pages of Ulysses" (My Brother's Keeper, p. 139).

[243] James Joyce and the Cultic Use of Fiction, p.33.

[244] For the mottos of the more important members of the Golden Dawn, see Howe, The Magicians of the Golden Dawn, pp.296-97. King says that Yeats's motto was taken from Lévi; he also observes that in the early days of the Order, Yeats was fascinated with diabolism, which he pronounced "dyahbolism" (The Rites of Modern Occult Magic, p.51). I can find no reference to Yeats's motto in Joyce, nor can Hodgart, although he agrees that it is Joycean ("Music and the Mime of Mick, Nick, and the Maggies/ Book II, chapter i," p.85). However, in a note to his mention of the reversed holy words in "Circe," Gilbert quotes the motto; he terms it a "Kabalistic axiom," but does not attribute it either to Yeats or Lévi (James Joyce's 'Ulysses', p.296, n.2). It seems likely that Gilbert

gleaned the motto from his conversations with Joyce. According to Lévi, "the qabalists say that the occult name of the devil, his true name, is that of Jehovah written backwards. This, for the initiate, is a complete revelation of the mysteries of the tetragram. In fact, the order of the letters of that great name indicates the predominance of the idea over form, of the active over the passive, of cause over effect. By reversing that order one obtains the contrary. Jehovah is he who tames Nature as it were a superb horse and makes it go where he will; Chavajoh (the demon) is the horse without a bridle who, like those of the Egyptians of the song of Moses, falls upon its rider, and hurls him beneath it, into the abyss" (The Key of the Mysteries, p.148).

[245] Aion, in The Collected Works, IX.2, 30.

[246] Maria Leach and Jerome Fried, eds., Funk and Wagnalls Standard Dictionary of Folklore, Mythology, and Legend, s.v. "backward speech or behavior."

[247] Benstock, Joyce-Again's Wake, p.181.

[248] James Joyce's 'Ulysses', p.172.

[249] Ibid., pp.172, 175. Whitman discusses the techniques of reversal and ring-composition in the Iliad and the Odyssey and observes that hysteron proteron, which suggested concentric circles, was exploited for architectonic purposes, having been originally used in mnemonics (Homer and the Heroic Tradition, pp.97-98).

[250] Moseley has found in FW,18.17-19.19 every rhetorical device named by Gilbert as occurring in "Aeolus." She remarks chiasmus in "Here say figurines billycoose arming and mounting. Mounting and arming bellicose figurines see here" (18.33-.34); hysteron proteron in "O stoop to please" (19.10) and "please to stoop" (19.02); and metathesis in "like yoxen at the turnpaht" (18.32) ("'Ramasbatham,'" pp.10, 13, 11).

[251] Brendan O Hehir, A Gaelic Lexicon for 'Finnegans Wake' and Glossary for Joyce's Other Works, p.401; he gives other examples.

[252] JJ, p.477.

[253] Letters, II, 202, 7 December 1906; original punctuation. Also quoted in Ellmann, JJ, p.237.

[254] Campbell and Robinson, Skeleton Key, p.46, n.19; for an analysis of the numbers 566 and 1132, see pp.45-46.

[255] MS.VI.B.46, p.[60]; the entry in question is crossed through in red, indicating that Joyce used it in Finnegans Wake. For examples of curious upside down writing, see MS.VI.B.2, pp.[106] and [109]; for bibliographical description of this MS, see Spielberg, comp., James Joyce's Manuscripts and Letters at the University of Buffalo, p.101.

[256] For further remarks on the mirror, see Boyle, "The Artist as Balzacian Wilde Ass/ Book I, chapters vii-viii," in A Conceptual Guide

to 'Finnegans Wake', ed. Begnal and Senn.

[257] Arthur Schopenhauer, "On Some Forms of Literature," in The Pessimist's Handbook: A Collection of Popular Essays, p.492; his Parerga und Paralipomena was published in 1851. Hart [?] suggests that Question 9 (FW,143.03-.28) means that H.C.E. will never be purged of karmic colours and become what Jainism knows as a Tirthankara ("Explications - for the greeter glossary of code," pp.4-5).

[258] The case is the subject of Morton Prince's The Dissociation of a Personality: A Biographical Study in Abnormal Psychology (1905); Glasheen and Atherton have documented Joyce's use of the case ("Finnegans Wake and the Girls from Boston, Mass."; Books at the Wake, pp.40-41). Jung records his adverse reaction to an article by Prince in "Morton Prince, 'The Mechanism and Interpretation of Dreams': A Critical Review" (1911) (in Freud and Psychoanalysis, The Collected Works, IV, 56-73). Freud also argues against Prince's article, on the basis that Prince has never provided "a dynamic explanation" of repression, while Freud himself has accounted for it by the theory of repression (The Interpretation of Dreams [1900], in The Standard Edition of the Complete Psychological Works of Sigmund Freud, V, 521).

[259] The Standard Edition, XIII, 85. It must be noted that Freud's observations on magic are totally derived from the writings of the great anthropologists of the nineteenth century; he himself speaks of "the standard works of Herbert Spencer, J. G. Frazer, Andrew Lang, E. B. Tylor and Wilhelm Wundt, from which all that I have to say about animism and magic is derived. My own contribution is visible only in my selection both of material and of opinions" (ibid., p.75, n.1).

[260] Ibid., p.89.

[261] Ibid., p.90. He cites [S.] Reinach, "L'Art et la magie" (1905-12), in Cultes, mythes et religions, 4 vols. (Paris), I, 125-36; in Reinach's view, primitive cave painters wanted not to delight but to conjure up the objects they represented.

[262] Totem and Taboo, in Standard Edition, XIII, 91-92.

[263] Ibid., p.93. Freud's bracketed translation; my emphasis.

[264] Begnal agrees that Joyce must have read Totem and Taboo, but he gives only the most general parallels, such as the incest and exogamy themes (Begnal and Eckley, Narrator and Character in 'Finnegans Wake', pp.35-36).

[265] Totem and Taboo, p.2.

[266] Ibid., p.32. As he says, his account is derived from the major authorities on the subject (ibid., p.3, n.2). Taking the word from the North American Indians, the Englishman J. Long first spoke of the "totam" in 1791. From the extensive literature on the subject, Freud cites as of especial importance J. G. Frazer's Totemism and Exogamy (1910) and all of

Andrew Lang's works, including *The Secret of the Totem* (1905).

[267] Joyce's "teetootomtotalitarian" also includes the Eng. "teetotum," which refers to a four-sided gambling die with a letter on each side, one of which is a *T*, and hence the name (OED). After I made this observation, Motycka published a note in which he draws precisely the same connection (Oct. 1975); he sees a parallel between the four sides of the teetotum and Vico's four ages and connects the *T* on the die to the *T* in *Finnegans Wake* ("Some Notes on II.2").

[268] *Totem and Taboo*, p.32.

[269] Ibid., p.67.

[270] Ibid., p.18; original punctuation.

[271] Joyce's concept of taboo must be partially derived from the ancient Celtic religion. Glossing the word *geasa* in one of Joyce's notes for the "Oxen of the Sun" episode, Herring writes, "*geasa*: Irish for 'magical injunctions (tabus)' (Brendan O Hehir, *A Gaelic Lexicon for 'Finnegans Wake'* . . . [Berkeley, 1967], p.221). The word is repeated at 'Circe' 16:67 and appears in *FW* 392:24" (*Joyce's 'Ulysses' Notesheets in the British Museum*, p.215, n.93). For Freud's discussion of taboo in ancient Ireland, see *Totem and Taboo*, p.46. See also n.3 in Chapter Four of the present study.

[272] *Totem and Taboo*, p.67.

[273] Morris Jastrow writes that "astrological considerations likewise already regulated in ancient Babylonia the distinction of lucky and unlucky days, which passing down to the Greeks and Romans (*dies fasti* and *nefasti*) found a striking expression in Hesiod's *Works and Days*" ("Astrology," *Encyclopaedia Britannica*, 11th ed., II, 798). See also the Appendix, "The Calendar of Lucky and Unlucky Days," in *Hesiod: The Poems and Fragments*, trans. A. W. Mair, pp.162-66; and William Reginald Halliday, *Lectures on the History of Roman Religion from Numa to Augustus*, p. 44. Atherton points out that Joyce mentions Halliday in an astrological context at *FW*,264.04 (*Books at the Wake*, p.253).

[274] Atherton writes that "*Sacer esto*" is a quotation from *The Law of the Twelve Tables*; he also refers to the *Satires* of Horace (*Books at the Wake*, p.287). Ruth von Phul translates this question as "Be thou sacred, dedicated, a sacrifice; Be thou criminal, accursed"; she thinks the answer to it implies that Shem contains all the characters of the dream ("Five Explications," p.85). Besides enlarging on the connection with *The Law of the Twelve Tables*, Thomas A. Cowan translates the question as "let him be accursed" and the answer as "we are Shem," which, he says, demonstrates the consubstantiality of the brothers ("Sacer Esto?" pp.39, 42). Epstein traces the question to the third satire of Horace's second book of satires (*Sermones*, xi.180-81) and suggests as a translation, "is it you who are referred to, as one or both of the brothers in the Horace satire, as set apart, for good or evil?" ("The Turning Point/ Book I, chapter vi," in *A Conceptual Guide to 'Finnegans Wake'*, ed. Begnal and Senn, pp.64-65). See also Knuth, "Shem's Riddle of the Universe

(continued)," p.95, n.3.

[275] Atherton discusses this passage in some detail (*Books at the Wake*, pp.174-75). In "Hebrew in the *Wake*," David Goodwin supplies lists of Hebrew words and letters, plus translations for all of *Finnegans Wake*; for *FW*,258-59, he gives only the following incomplete list: "lammalelouh" (258.03; "why not; or, why not her"); "Kidoosh" (258.05; "holy; prayer before drinking wine"); "Mezouzalem" (258.08-.09; "Mezouzah [a locket containing the Jewish declaration of faith, the Sh'ma . . . see 258.13 in text; this entire passage is full of Hebrew prayers]; Jerusalem"); "Makal" (258.10; "rod"). In his "More Hebrew," Skrabanek gives the following list: "Yarrah" (258.09-.10; *yareah*, "moon"); "Immi" (258.11; *emi*, "my mother"); "ammi" (258.11; *'ami*, "my nation"); "Semmi" (258.11; *Šemi*, "my nami" [sic]; *šemeš*, "sun"); "lebab" (258.12; *lebhabh*, "heart").

[276] Abel's pamphlet was first published in 1884; it was included in his *Philological Essays* [*Sprachwissenschaftliche Abhandlungen*] (Leipzig, 1885). In a note to Freud's essay, the editor, James Strachey, remarks that Abel's findings may be outdated; "this is especially true of his Egyptological comments, which were made before Erman had put Egyptian philology for the first time on a scientific basis" (*The Standard Edition*, XI, 154, n.).

[277] "The Antithetical Meaning of Primal Words," in *Standard Edition*, XI, 155; he is quoting *The Interpretation of Dreams*, in *Standard Edition*, IV, 318. Cf. D. H. Lawrence's observation that "the dream-conclusion is almost invariably just the *reverse* of the soul's desire, in any distress-dream. Popular dream-telling understood this, and pronounced that you must read dreams backwards. Dream of a wedding, and it means a funeral. Wish your friend well, and fear his death, and you will dream of his funeral. Every desire has its corresponding fear that the desire shall not be fulfilled. It is *fear* which forms an arrest-point in the psyche, hence an image" (*Fantasia of the Unconscious* [1922], p.249; his emphasis).

[278] "The Antithetical Meaning of Primal Words," pp.156-57. On the role of puns in ancient Egyptian dream interpretation, see Joseph Kaster, trans. and ed., *The Literature and Mythology of Ancient Egypt*, pp.153ff. Alan Hull Walton notes that Arabic dream interpretation also "turns generally upon words with several meanings, or upon references to the radical letters of which they are composed" (Walton, ed., *The Perfumed Garden of the Shaykh Nefzawi*, by Shaykh Umar ibn Muhammed al-Nefzawi, trans. Sir Richard Burton, p.169, n.124; see Chap.viii, pp.167-81 for examples).

[279] "The Antithetical Meaning of Primal Words," p.158.

[280] Ibid., p.159.

[281] Abel, "The Origin of Language," in *Philological Essays*, p.305; quoted, with the examples, in Freud, "The Antithetical Meaning of Primal Words," p.160; brackets and punctuation in original.

[282] "The Antithetical Meaning of Primal Words," p.161.

[283] Denis de Rougemont, Love in the Western World, p.109 and n.1.

[284] Glasheen, Second Census, s.v. "Ptolemy."

[285] Conversations with James Joyce, p.48.

[286] Atherton, Books at the Wake, p.195, n.1. For Joyce and Egypt, see: Atherton, pp.191-200 et passim; Begnal, "Some Gleanings from the Book of the Dead" (he lists some gods and their significances, as given in E. A. Wallis Budge, trans. and ed., The Book of the Dead); Campbell and Robinson, Skeleton Key, passim; Cixous, The Exile of James Joyce, Appendix I, "Thoth and Egyptian Religion," pp.737-38, and Appendix II, "Thoth as Shem or Shaun," pp.739-40; Jackson I. Cope, "From Egyptian Rubbish-heaps to Finnegans Wake" (he considers James Hope Moulton's From Egyptian Rubbish-heaps as a source); Glasheen, "Some References to Thoth," and Second Census, s.v. "Horus and Set" and "Isis and Osiris"; Hart, "Shem's Bodily Getup: A Note on Some Unused Theology"; Michael Stuart, "Mr. Joyce's Word-Creatures" (he discusses Egyptian elements in "The Ondt and the Gracehoper").

[287] H.C.E. as tesseract is discussed by Cowan, who concludes that H.C.E. is a cheat at dice ("St Humphrey as Tesseract"), and by Rose, who, in reply to Cowan, can find no dice and thinks that regularity is implied ("His Canonicititious Existence").

[288] Because it is a common reversal that could occur to anyone, I cannot assent entirely to Atherton's surmise that "Evil-it-is, lord of loaves in Amongded" (418.06) is an echo of Bruno's remark in Lewis Carroll's Sylvie and Bruno that "evil" is the opposite of "live" (Books at the Wake, p.125; he cites The Complete Works of Lewis Carroll [London: Nonesuch; New York: Random House, 1939], p.529). However, there seems to be little doubt that FW,418.06 is another reversal similar to those noted in the Egyptian language by Abel. "Amongded" is Amentat, the ancient Egyptian "Place of the Dead," as Atherton points out. The "lord of loaves" is the "lord of lives," Osiris, who grants life or death ("evil") in the underworld; the syllable "ded" in "Amongded" is also the opposite of "life."

[289] Stuart Dodgson Collingwood, The Life and Letters of Lewis Carroll (London: Thomas Nelson, [1898]), p.164; original punctuation; quoted in Atherton, Books at the Wake, p.132. Collingwood's book is Item 46 in Connolly, The Personal Library of James Joyce, p.11. Atherton does not give the title or date of publication of Dodgson's essay, which was bound with several of his essays in Notes by an Oxford Chiel; there, the "meat safe" passage occurs in a slightly different form.

[290] Books at the Wake, pp.132-33. For Atem and onanism, see Jung, Aion, in The Collected Works, IX.2, p.207.

[291] See Atherton, Books at the Wake, p.131.

[292] Letters, I, 214, 24 May 1924; Joyce's emphasis. Partially quoted in Ellmann, JJ, p.575.

[293] Hart shows how Shem controls the first half of the book (*Structure and Motif*, pp.131-32).

[294] For the barrel motif, see ibid., p.217.

[295] Ibid., pp.67-69. Solomon suggests that *FW*,499 and 500 occur in reverse order; she also thinks it probable that all of Book III is in reverse (*Eternal Geomater*, pp.72-73). Benstock speaks of "the backward progress of Wake-time"; in his opinion, Book III arrives at the childhood of Jerry and Kevin in such a fashion (*Joyce-Again's Wake*, p.18). Motycka claims that the numbers at *FW*,284.16-.17 add up to 563, which is the number of the days of the year reversed, and that, with the reference to "nighttim . . . involted" (284.09), this reversal implies a backward view of time ("Some Notes on II.2").

[296] *Letters*, I, 261, to Harriet Shaw Weaver, 9 November 1927.

[297] For the view that both sons comprise the new H.C.E., see: Benstock, *Joyce-Again's Wake*, pp.352-55 et passim; Hart, *Structure and Motif*, pp.130-31 et passim; Tindall, *Reader's Guide to 'Finnegans Wake'*, pp.4, 314-15, et passim. For the coincidence of opposites, see: Atherton, *Books at the Wake*, pp.36, 39-42; Begnal, in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.53, 87-88, 91-95, 100; Benstock, *Joyce-Again's Wake*, pp.18-21, 240-54; Zack Bowen, *Musical Allusions in the Works of James Joyce: Early Poetry through 'Ulysses'*, pp.54-64 (he says that musical themes interchange and become consubstantial); Campbell and Robinson, *Skeleton Key*, p.343, n.14, p.350, n.20, et passim; Eckley, in Begnal and Eckley, p.201; Hart, *Structure and Motif*, pp.130-33 et passim; Matthew J. C. Hodgart and Mabel P. Worthington, *Song in the Works of James Joyce*, p.32; McHugh, "A Structural Theory of *Finnegans Wake*"; Solomon, *Eternal Geomater*, p.48; Tindall, *Reader's Guide to 'Finnegans Wake'*, p.319.

[298] *Aion*, in *The Collected Works*, IX.2, 64.

[299] *The Great Mother*, p.76. See also Mircea Eliade, *The Two and the One*, pp.122-28.

[300] A. E. Waite translates *Chesed* and *Geburah*, the names of the fourth and fifth Sephiroth, as "Mercy" and "Severity, Judgement, Power" (*The Holy Kabbalah: A Study of the Secret Tradition in Israel as Unfolded by Sons of the Doctrine for the Benefit and Consolation of the Elect Dispersed through the Lands and Ages of the Greater Exile*, p.195); in another place, Waite writes that "the equilibrium between Justice and Mercy must be assumed before the universe, having man for its object, could become possible, and the source of this notion must be sought in the *Bereshith Rabbah*" (*The Doctrine and Literature of the Kabalah*, p.214, n.); see also S. L. MacGregor Mathers, trans. and ed., *The Kabbalah Unveiled*, p.25. Other authorities give translations of the names which are not quite so close to "Mercy" and "Justice"; see: Gersom G. Scholem, *Major Trends in Jewish Mysticism*, p.213; Charles Poncé, *Kabbalah: An Introduction and Illumination for the World Today*, pp.125-27; Leo Schaya, *The Universal Meaning of the Kabbalah*, p.21. It is reasonably certain that

Joyce intends a cabbalistic meaning with Justius and Mercius (*FW*,187-95), because he earlier (161.12ff.) refers to Shem (Mercius) as "Caseous" (*Chesed*) and to Shaun (Justius) as "Burrus" (*Geburah*). Arland Ussher writes (1953) that Joyce's "interest in Cabbalism - like that of some French *symbolistes* - was in part, one suspects, a search for the grammar of power; for Joyce was near enough to supernatural religion to feel, superstitiously, that words are talismans, and that the Church, in her formularies, possesses a real magic well. (And it should be remembered that the notion of a secret language - known to 'adepts', and destined to supersede all existing languages - was at all times a Cabbalistic doctrine.)" (*Three Great Irishmen*, p.152; see also p.126). Ussher's statement might have been a solid basis for the exposition of Joyce's use of the Cabbala, but the fairly large critical response to the subject is fragmented and sometimes inaccurate. One wishes that Jackson L. Cope's article on the Cabbala in *Ulysses* had dealt with magical language, but instead, we are given a rather forced treatment of Bloom's sexual inadequacy as a cabbalistic allegory. The impression of close familiarity with cabbalistic literature which Cope gives may be illusory. For instance, he quotes Waite's statement that "there has been always . . . a certain class of students for whom the claims made by and on behalf of the Kabbalah have possessed importance, and this class is possibly larger now than at any time prior to the date of 1865"; in a note to this quotation, Cope writes, "I have not discovered why 1865 should be a watershed" ("*Ulysses*: Joyce's Kabbalah," p.95 and n.11; he is quoting Waite, *The Holy Kabbalah* [1929], p.xxxii). Waite's statement, with minor differences, is repeated from his earlier book, *The Doctrine and Literature of the Kabalah* (1902), and there he states quite clearly that 1865 is significant as the year in which Christian David Ginsburg's *The Kabbalah, its Doctrines, Development and Literature* was published (Waite, p.xv); Cope cites Waite's 1902 study in his text and notes. According to Atherton, "everything he [Joyce] uses in *Finnegans Wake* about the Cabbala seemed to be contained in the article on that subject in the eleventh edition of the *Encyclopaedia Britannica*" (*Books at the Wake*, p. 47); apparently following Atherton, G. A. Lameyer repeats this opinion ("The Automystic and the Cultic Twalette," p.157). This appears to be one of the few occasions when Atherton is mistaken; variations in spelling alone imply that Joyce had another source. For instance, the article from the *Encyclopaedia Britannica*, by Ginsburg and Stanley Arthur Cook, employs the spelling "Kabbalah," while in *Finnegans Wake*, Joyce refers only to "cabaleer" (234.03) and "cabalstone" (132.01); again, Ginsburg and Cook speak of the "Ēn-Sōph," while Joyce has it as "Ainsoph" (261.23). Cope also thinks that Atherton is mistaken here, but he blunts the force of his objection by referring to "John Atherton" (Cope, p.94, n.3). In *Ulysses*, Mastiansky and Citron say, "Belial! Laemlin of Istria! the false Messiah! Abulafia!" (*U*,497). Adams glosses Laemlin and Abulafia as "two obscure Jewish heretics from the Middle Ages" who both claimed to be the Messiah (*Surface and Symbol*, pp.140-41); Herring quotes Adams' gloss without question (*Joyce's 'Ulysses' Notesheets in the British Museum*, p.350, nn.55 and 56). I believe Adams misjudges one of the two figures; according to the venerable G. G. Scholem, Abulafia was a major prophet of ecstatic cabbalism (*Major Trends in Jewish Mysticism*, pp.119-55). For other commentary on Joyce and the Cabbala, see: Campbell and Robinson, *Skeleton Key*, pp.193-96, p.341, n.6, et passim; Epstein, *The Ordeal of Stephen Dedalus*, pp.123-24, 134; Glasheen, "Semper as

Oxhousehumper" (she finds an example of every Hebrew letter in Finnegans Wake); David Cohen, "Note" (an addendum to Glasheen); Donna Leah Henseler, "'Harpsdichord [sic],' The Formal Principle of HCE, ALP, and the Cad"; Motycka, "A Little Night Lesson: Viconian Structure in FW II.2" (he discusses the sephirotic tens and the gematria in II.2 in relation to thunder); Fritz Scheele, "Answers 11"; Senn, "Pat As Ah Be Seated" (Hebrew letters); Tindall, Reader's Guide to 'Finnegans Wake', p.174. For discussion of the Tetragrammaton, see: Glasheen, "Instances Perhaps of the Tetragrammaton in Finnegans Wake"; Hodgart, "Tetragrammaton (No.16, p.5) - Correspondence."

[301] Pagan Mysteries in the Renaissance, p.229; the quotation is from Nicholas of Cusa, De Pace seu Concordantia Fidei, Sec.1.

[302] Structure and Motif, pp.92-93; he quotes from A Vision (1937), pp.226-30. Boldereff gives the same attribution to the Dreaming Back (Hermes to His Son Thoth, p.206). Tindall notes that FW,293-95 is filled with references to Yeats (Reader's Guide to 'Finnegans Wake', p.184).

[303] A Vision (1937), p.226.

[304] See the Introduction by W. Y. Evans-Wentz to his edition of The Tibetan Book of the Dead: or The After-Death Experiences on the 'Bardo' Plane, according to Lāma Kazi Dawa-Samdup's English Rendering, pp.28-30.

[305] Eliade, Yoga: Immortality and Freedom, p.362. Paul Brunton quotes an Indian sage as saying, "you have thought yourself back into wisdom, which is the same as self-understanding. Thought is like a bullock cart which carries a man into the darkness of a mountain tunnel. Turn it backwards and you will be carried back to the light again . . . This backward-turning of thought is the highest Yoga" (A Search in Secret India, p.362)

NOTES TO CHAPTER THREE

[1] See Rosemond Tuve, Elizabethan and Metaphysical Imagery: Renaissance Poetic and Twentieth-Century Critics, p.214.

[2] William Wordsworth, The Prelude or Growth of a Poet's Mind, p. 137 (V.44).

[3] Percy Bysshe Shelley, "A Defence of Poetry" (1840), in Shelley's Prose, or The Trumpet of a Prophecy, p.293. For further references to the formula, see n.60 in Chapter Five of the present study.

[4] "Gérard de Nerval" (1899), in The Symbolist Movement in Literature, p.15; also quoted in James S. Atherton, The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake', p.51.

[5] Euclid, The Elements of Euclid: For the Use of Schools and Colleges, ed. Isaac Todhunter and S. L. Loney, p.5; Lewis Carroll, Logical Nonsense: The Works of Lewis Carroll, p.152.

[6] Wyndham Lewis the Artist: From 'Blast' to Burlington House, p.59.

[7] "My Friend James Joyce," in James Joyce: Two Decades of Criticism, ed. Seon Givens, p.15. Richard Ellmann quotes Jolas, but neglects to provide the source (James Joyce, p.608, n.).

[8] A Vision (1937), pp.23-24.

[9] Richard E. Madtes demonstrates that this passage grew out of Joyce's rough note "cross Xation = nought" ("Joyce and the Building of Ithaca," p.449).

[10] Letters of James Joyce, I, 159, dated "end February 1921." According to Madtes, Joyce's rough notes to "Ithaca" reveal his knowledge of scientific terms; "even characters are regarded mathematically: 'LB tangent,' or (whatever this means) 'SD radius vector LB & SD = 0.' Entry after entry records mathematical formulae or equations, most of which, Joyce must have known, could not possibly be used in the final text, and many of which seem little more than numerical doodling. Very occasionally, however, he managed to make something of his equations, especially those not so baldly numerical. The entry 'like X like = + unlike X," for example, is probably the source of the text's 'common factors of similarity between their respective like and unlike reactions' (666)" ("Joyce and the Building of Ithaca," p.449).

[11] The First Six Books of the Elements of Euclid and Propositions I-XXI of Book XI . . . , 13th ed. (Dublin: Hodges, Figgis, and London: Longmans, Green, 1894), p.78; quoted in Connolly, "Joyce's 'The Sisters': A Pennyworth of Snuff," p.195 and n.20. In agreement with the position

that the gnomon stands for incompleteness are: Edward Brandabur, *A Scrupulous Meanness: A Study of Joyce's Early Work*, pp.40-41; Gerhard Friedrich, "The Gnomonic Clue to James Joyce's *Dubliners*," and "The Perspective of Joyce's *Dubliners*," in *James Joyce's 'Dubliners': A Critical Handbook*, ed. James R. Baker and Thomas F. Staley; Fritz Senn, "The Aliments of Jumeantry"; William York Tindall, *James Joyce: His Way of Interpreting the Modern World*, p.14; Florence L. Walzl, "Joyce's 'The Sisters': A Development," p.389. Senn, Tindall, and Walzl add that the gnomon also implies knowing. Connolly's article (1965) is convenient as a summary of other work on "The Sisters," although he seems to have overlooked Friedrich, who earlier (1957) came to substantially the same conclusions in a more convincing manner. Friedrich suggests that Joyce found a similarity between "paralysis" and "parallelogram," because a gnomon is a type of parallelogram, as defined in the *Elements*, Bk.II, Definition 2; he also thinks that Uncle Jack's statement "Let him learn to box his corner" (*Dubliners*,11) significantly adds to the gnomon reference ("The Gnomonic Clue to James Joyce's *Dubliners*," p.422).

[12] "Joyce's 'The Sisters': A Pennyworth of Snuff," p.195, n.20.

[13] Bk.II, Definition 2 in *The Elements of Euclid*, ed. Todhunter and Loney, p.87.

[14] There are critics of "The Sisters" who misleadingly gloss *gnomon* as an instrument for measuring time, when the reference in Joyce is clearly to "the word *gnomon* in the Euclid" (*Dubliners*,9). William A. Fahey fancifully writes that "Joyce, the artist, objective and detached, standing between church and nation, marks the historical hour through his created shadow, Stephen" ("Joyce's 'The Sisters'"). Seemingly in complete innocence of the Euclidean meaning of the word, Hélène Cixous improbably suggests that since a gnomon measures the passage of night and day (how can a sun-dial tell the time of night?), the boy passes out of the darkness of the priest's influence into the light (*The Exile of James Joyce*, p.382). Bernard Benstock thinks that the "*gnomon* reminds us to ascertain the shape of the parallelogram from the existing shadow (the *Drapery* sign on the shopfront is significant)" ("Joyce's 'The Sisters'"). See also Friedrich, "The Gnomonic Clue to James Joyce's *Dubliners*," p.423.

[15] Walzl suggests that "to box his corner" (*Dubliners*,11) is a carpenter's term and implies the development into a whole ("Joyce's 'The Sisters': A Development," p.400).

[16] *Physics*, iii.4.203^{a}13-15, trans. R. P. Hardie and R. K. Gaye, in *The Basic Works of Aristotle*, ed. Richard McKeon, p.258. For commentary, see Sir Thomas L. Heath, *Mathematics in Aristotle*, pp.101-02.

[17] *Categories*, 14.29-31, trans. E. M. Edghill, in *Basic Works of Aristotle*, p.36. See Heath, *Mathematics in Aristotle*, pp.20-21.

[18] My account of the term *gnomon* is abstracted from that of Heath, *A History of Greek Mathematics*, I, 78.

[19] *Philolaos des Pythagoreers Lehren*, pp.141, 144; quoted in Heath,

A History of Greek Mathematics, I, 78. See also Heath's remark in his edition of Euclid, *The Thirteen Books of Euclid's Elements*, I, 64.

[20] Besides Senn, Tindall, and Walzl, cited in n.11 above, the following think that the gnomon implies knowing: Fahey, "Joyce's 'The Sisters'"; Eileen Kennedy, "'Lying Still': Another Look at 'The Sisters,'" p.364; Warren Beck, *Joyce's 'Dubliners': Substance, Vision, and Art*, p. 75; Paul C. Doherty, "Words as Idols: The Epiphany in James Joyce's 'The Sisters.'" Robert M. Adams takes a more neutral position and sees the gnomon as an "index" of paralysis (*James Joyce: Common Sense and Beyond*, p.70).

[21] *Letters*, I, 242, to Harriet Shaw Weaver, 15 July 1926. The connection between Joyce's Diagram and Euclid's First Proposition has been noted previously by: Tindall, *A Reader's Guide to James Joyce*, p.283, and *A Reader's Guide to 'Finnegans Wake'*, p.177; and Senn, "The Aliments of Jumeantry." In a discussion of *FW*,II.2, Adaline Glasheen notes that Joyce writes, concerning the chapter, that "the technique here is a reproduction of a schoolboy's (and schoolgirl's) old classbook complete with marginalia by the twins, who change sides at half time, footnotes by the girl (who doesn't), a Euclid diagram, funny drawings etc. It was like that in Ur of the Chaldees too, I daresay" (*Letters*, I, 406, to Frank Budgen, "end July 1939"; quoted in Glasheen, *A Second Census of 'Finnegans Wake': An Index of the Characters and Their Roles*, p.xl). However, apart from listing four occurrences of Euclid's name in *Finnegans Wake* (155.32, 206.13, 283.24, 302.12), Glasheen makes no further comment on the identity of the "Euclid diagram" (ibid., s.v. "Euclid"). Atherton gives the same attributions and also overlooks the connection with the First Proposition (*Books at the Wake*, p.248).

[22] Euclid, *The First Six Books of the Elements of Euclid and Propositions I.-XXI. of Book XI., and an Appendix on the Cyclinder, Sphere, Cone, Etc., with Copious Annotations and Numerous Exercises*, ed. John Casey, 7th ed. (1889), p.14 (hereafter cited as *Six Books of Elements*).

[23] Ibid.

[24] Senn, p.52.

[25] Ibid., p.53. The two previous quotations from Euclid I have taken from *Six Books of Elements*, ed. Casey, and not from Todhunter's edition, as Senn does.

[26] "The Aliments of Jumeantry," p.52.

[27] Ibid., pp.51-52. In a comment on the "Ithaca" episode, Phillip F. Herring writes that "Budgen probably copied some of the mathematical material present in the 'Ithaca' notesheets from Isaac Todhunter's *Algebra for the Use of Colleges and Schools* (London, 1873) and sent it to Joyce. See Budgen, *Myselves When Young* (London, 1970), p.210. I have not been able to establish conclusively that the material came from Todhunter and nowhere else, however" (Herring, ed., *Joyce's 'Ulysses' Notesheets in the British Museum*, by Joyce, p.436, n.30). Atherton thinks that the *School Algebra* of Hall and Knight, who worked with Todhunter, is alluded

to at *FW*,283.25 (*Books at the Wake*, p.252). For a bibliography of texts, translations, commentaries, and studies of Euclid, see George Sarton, *Introduction to the History of Science*, I, 154-56. F. J. Duarte lists 123 editions of Euclid published from 1482 to 1961 (*Bibliografía Euclides Arquimedes Newton*, II).

[28] This passage remained quite stable during the process of revision; in the original draft it read "Now with Olaf as centrum and Olaf's Lambtail as his spokesman, cumscribe a circlus" (Joyce, *A First-Draft Version of 'Finnegans Wake'*, ed. David Hayman, p.163).

[29] *Six Books of Elements*, p.14; *The Elements of Euclid*, p.9.

[30] Joyce's use of Casey has been noted by: Connolly, "Joyce's 'The Sisters': A Pennyworth of Snuff," p.195, n.20; and Tindall, *A Reader's Guide to James Joyce*, p.283, and *A Reader's Guide to 'Finnegans Wake'*, pp.148, 177.

[31] "The Aliments of Jumeantry," p.52. See *The Elements of Euclid*, ed. Todhunter and Loney, pp.1, 4.

[32] *Six Books of Elements*, p.6.

[33] Definition 20 in *The Elements of Euclid*, p.3.

[34] *Six Books of Elements*, p.9.

[35] Ibid., p.15.

[36] "A *rhombus* is a four-sided figure which has all its sides equal, but its angles are not right angles" (Bk.I, Definition 33 in *The Elements of Euclid*, p.5).

[37] *Six Books of Elements*, p.171.

[38] Ibid. See *The Elements of Euclid*, ed. Todhunter and Loney, pp. 200-01.

[39] At issue is Proposition 32 of the *Elements*, Bk.I, that the sum of three angles equals that of two right angles; Casey gives the proofs of Legendre and Hamilton (*Six Books of Elements*, pp.299-302).

[40] Glasheen, *Second Census*, s.v. "Hamilton, Sir William Rowan"; Atherton, *Books at the Wake*, p.253.

[41] Sir Edmund Whittaker, "William Rowan Hamilton," in *Mathematics*, ed. Samuel Rapport and Helen Wright, p.75.

[42] Robert Graves, "Speaking Freely: Interview by Edwin Newman on the American Air, February 15th 1970," in *Difficult Questions, Easy Answers*, p.206. Graves goes on to say that since quaternions were essential to the development of nuclear physics, that Hamilton was a century ahead of his time can be explained only by the non-existence of time.

[43] "A Geometry Problem in *Finnegans Wake*," p.3.

[44] "The Geometry Problem (283.30)," p.2; for an explanatory diagram, see p.3. Danis Rose reads *FW*,283.32-284.04 as "show that the medians intersecting at right angles the base of a given obtuse one bisect both the arcs that are subtended behind." In Rose's opinion, great circles may be involved, but it is better to leave this obscure problem alone, because the word "pthwndxrclzp!" (284.14) and its answer are Joyce's statement of the absurdity of Euclidean methodology; "Joyce intimates that the purpose and end of geometry is to educate in logic as an introduction to meditation. Of itself the mathematics is inanity (as Descartes believed), mere application is purposeful. That is quite all. It is *method*. Joyce describes the manner of his triumph over this method. By language, with language, in language. . . . *It is merely another chance ordering of the universal chaos*" ("Ad Maturing Daily Glory Aims [282.6]," p.47; Rose's emphasis). What Rose claims is essentially the position of Jules Henri Poincaré, who writes in *Science and Hypothesis* that "the axioms of geometry therefore are neither synthetic a priori judgments nor experimental facts. They are conventions . . . the axioms of geometry . . . are merely disguised definitions" (Part II, Chap.iii, pp.38-39). Although Joyce names Poincaré in *FW*,II.2 as "Pointcarried" (304.05), this is not necessarily an espousal of his position. As my comments in this chapter on Joyce's use of Plato, Proclus, Bruno, Yeats, and Vico (who was an opponent of Descartes) make clear, I am in utter disagreement with Rose's interpretation of Joyce as a Cartesian.

[45] Margaret Solomon cites this passage; her comment on "down the center" (564.10) is "here, the 'bisector' is included in the image" (*Eternal Geomater: The Sexual Universe of 'Finnegans Wake'*, p.108). She is referring to her Fig.1, in which an *E* and a *T* are superimposed on a triangle which they bisect; she thinks there is a vertical bisector in Joyce's Diagram, running from π to P. In my discussion of *FW*,283.32-284.04, above, I consider a solution involving such a vertical bisector and discard it as too complicated. However, if one wished to pursue this line of speculation, Proposition 3, Corollary 4 of *Elements*, Bk.III, which reads "the line joining the centres of two intersecting circles bisects their common chord perpendicularly," would be relevant; see also Bk.I, Proposition 10, "to bisect a given finite right line" (*Six Books of Elements*, ed. Casey, pp.112, 26). The normal construction for the bisection of a line involves the bisection of the upper angle of an equilateral triangle drawn on the line. However, Proclus Diadochus tells us that Apollonius of Perga bisected a line by a construction identical, but for the vertical bisector, to that for Bk.I, Proposition 1 of the *Elements* (*A Commentary on the First Book of Euclid's Elements*, pp.217-18 [Friedlein 279-80]); this redundant construction is similar to Joyce's Diagram. The method of Apollonius, with the same diagram and lettering as in Proclus, is also given in the discussion of Bk.I, Proposition 10 in *The Elements of Geometrie of the Most Auncient Philosopher Evclide of Megara* (1570), trans. H. Billingsley with a "Mathematicall Praeface" by John Dee, fol.20^{r}; the method of Apollonius is again illustrated by a figure that is almost identical with Joyce's Diagram in Bk.I, Proposition 11, Problem 6, "vpon a right line geuen, to rayse vp from a poynt geuen in the same line a perpendicular line" (ibid., fols.

20^{v} and 21^{r}).

[46] For Dodgson's statement of indebtedness to Todhunter, see p.vi.

[47] *The Fifth Book of Euclid, Treated Algebraically . . .* (Oxford, London, 1868); *Euclid, Book V Proved Algebraically . . .* (Oxford, 1874); *Euclid and His Modern Rivals* (London, Oxford, 1879). Titles and publication data taken from the *British Museum General Catalogue of Printed Books*, LXIX (1960), cols.286, 287, and LIV (1960), col.102.

[48] I have been unable to examine this book. The publication data is given as "n.p.: Holy, n.d." in Mary Burnham, ed., *The United States Catalog: Books in Print, January 1, 1928*, p.921.

[49] I have been unable to examine this book. The publication data is given as Oxford: Clarendon Press, 1899-1901 in the *British Museum General Catalogue*, LXXIII (1961), col.326.

[50] 1st ed. 1795, 10th ed. 1846; cited in *Thirteen Books of Euclid's Elements*, ed. Heath, I, 111.

[51] Heath, *History of Greek Mathematics*, I, 358.

[52] Anicius Manlius Torquatus Severinus Boethius, *De Institutione Arithmetica Libri Duo; De Institutione Musica Libri Quinque. Accedit Geometria Quae Fertur Boetii*, p.390.

[53] *The Quadrivium of Martianus Capella: Latin Traditions in the Mathematical Sciences*, in *Martianus Capella and the Seven Liberal Arts*, I, 148 (vi.723-24).

[54] *Opus Tertium*, C.xx.6; cited in *Thirteen Books of Euclid's Elements*, ed. Heath, I, 416.

[55] Geoffrey Chaucer, *Chaucer's Major Poetry*, ed. Albert C. Baugh, p.141.

[56] *Thirteen Books of Euclid's Elements*, ed. Heath, I, 415.

[57] C. A. M. Fennell, *Stanford Dictionary of Anglicised Words and Phrases*; quoted in *Thirteen Books of Euclid's Elements*, ed. Heath, I, 416.

[58] "Charivaria," *Punch, or the London Charivari*, 14 October 1925, p.393. Also quoted in *Thirteen Books of Euclid's Elements*, I, 416.

[59] Basing his conclusion on the episode in Exod. 17 in which a herd of wild asses reveals the location of water in the desert, Tacitus reports that the Jews practised ass-worship (*Histories*, trans. W. Hamilton Fyfe, II, 204-05 [v.3-4]). *Histories*, v.3-6 has also been translated by Shelley, under the title "On the Jews" (*The Complete Works*, VII, 267-70). A different explanation of the origin of the slander is given by W. Max Müller, who remarks that the god Set is an ass and that the Egyptian *iô'* ("ass") is said to resemble the Hebrew pronunciation of Jehovah as

Yāhū or Yāhō̂ (*Egyptian*, in *The Mythology of All Races*, ed. Louis Herbert Gray, George Foot Moore, and John Arnott MacCulloch, XII, 390, n.35). The charge of onolatry must have enjoyed some currency, because Josephus is at pains to refute it (*Against Apion, or, On the Antiquity of the Jews*, ii.79-87, in *Josephus*, I, 325-29). For further classical references, see: Carl Jung, *Aion: Researches into the Phenomonology of the Self*, in *The Collected Works of C. G. Jung*, IX.2, 75-76; and Northcote W. Thomas, "Animals," in *Encyclopedia of Religion and Ethics*, ed. James Hastings, John A. Selbie, and Louis H. Gray, I, 501. Tertullian reports that the slander was transferred to the Christians, on account of their relation to the Jewish religion; in his day a criminal walked the streets with a picture entitled "The God of the Christians, Ass-Begotten," which depicted a human figure with the ears of an ass and a hoof for a foot (*Apologeticus*, xvi.1-5, 12-13, in *Apology. De Spectaculis*, pp.81-83, 85-87). In 1857, a similar caricature, in which a boy venerates an ass-headed Christ on the Cross, was discovered in the Palace of the Caesars (Maurice M. Hassett, "The Ass in Caricature of Christian Beliefs and Practices," in *The Catholic Encyclopedia* [1907-12], ed. Charles G. Herbermann et al.). An idea of this caricature may be had from the illustration in Benstock, *Joyce-Again's Wake: An Analysis of 'Finnegans Wake'*, p.266. According to E. K. Chambers, during the mediaeval Feast of the Ass the priest concluded Mass with "Hee-haw!" instead of "Ite, missa est," and the people answered "Hee-haw! hee-haw!" (*The Mediaeval Stage*, I, 287; cited in Henry Bett, *Nursery Rhymes and Tales: Their Origin and History*, p.89). Bett's book was in Joyce's Paris library (Connolly, *The Personal Library of James Joyce*, Item 23, p.9).

[60] Bruno's use of an ass as the symbol of the holy void beyond the Sephiroth in his *Cabala del Cavallo Pegaseo* (1585) is interpreted by Frances A. Yates not as blasphemy, but as the expression of all negative theology (*Giordano Bruno and the Hermetic Tradition*, pp.259-61); see also John M. Steadman, "Una and the Clergy: The Ass Symbol in *The Faerie Queen*," p.136, n.22. Both Donna L. Henseler and Grace Eckley associate the ass in *Finnegans Wake* with Bruno's ass ("Vico's Doctrine of *Ricorso* in James Joyce's *Finnegans Wake*, pp.162, 192; "Looking Forward to a Brightening Day/ Book IV, chapter i," in *A Conceptual Guide to 'Finnegans Wake'*, ed. Michael H. Begnal and Fritz Senn, p.217). Ruth von Phul identifies the ass with Jerry and Joyce ("A Note on the Donkey in *FW*"). Begnal says the ass which narrates *FW*,III.1-3 is possibly Shem (in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, p.58). Adams relates the donkey in *Ulysses* to doubt and betrayal ("Hades," in *James Joyce's 'Ulysses': Critical Essays*, ed. Hart and Hayman, p.104).

[61] *Thirteen Books of Euclid's Elements*, pp.417-18; according to Heath, θεώρημα τῆς νύμφης is Plutarch's term for the theorem of the bride (*De Iside et Osiride*,56).

[62] *James Joyce's Scribbledehobble: The Ur-Workbook for 'Finnegans Wake'*, ed. Connolly, p.3; much of the entry is crossed in red, indicating that it has been used in the final text. Hayman examines the evolution of this material, which was to have begun II.2. He says it is part of one of only three notes that Joyce omitted completely or changed; "Joyce saw fit after six revise-and-complete drafts to chop it into kindling, preserving intact only the first page or so, discarding a large segment

and using most of the remainder in Issy's footnotes" ("'Scribbledehobbles' and How They Grew: A Turning Point in the Development of a Chapter," in *Twelve and a Tilly: Essays on the Occasion of the 25th Anniversary of 'Finnegans Wake'*, ed. Jack B. Dalton and Clive Hart, p.107).

[63] Rev. Walter W. Skeat, ed., *The Complete Works of Geoffrey Chaucer*, II, 479-80; also cited in *Thirteen Books of Euclid's Elements*, ed. Heath, I, 418. Skeat goes on to discuss Pandarus' confusion between "fleming of wrecches," which refers to Proposition 5, and "Dulcarnon," which refers to Proposition 47; he writes that "this explanation, partly due to the Rev. W. G. Clark (joint-editor of the Globe Shakespeare), was first given in the *Athenaeum*, Sept.23, 1871, p.393, in an article written by myself."

[64] According to Ellmann, Joyce expressed his distaste for intellectual conversation by saying, "if only they'd talk about turnips!" (*JJ*, p.715).

[65] For complete bibliographical discussion, see: Charles Thomas-Stanford, *Early Editions of Euclid's Elements*, pp.43-44; and R. C. Archibald, "The First Translation of Euclid's *Elements* into English and Its Sources." For an extended commentary on Dee's "Mathematicall Praeface," see Yates, *Theatre of the World*, pp.1-41 et passim.

[66] *The Elements of Geometrie of the Most Auncient Philosopher Evclide of Megara*, fol.58^{r} (hereafter cited as *Elements of Geometrie*); also quoted in *Thirteen Books of Euclid's Elements*, ed. Heath, p.418.

[67] *Elements of Geometrie*, sig.π^{v}. I follow the suggestion of Ronald B. McKerrow concerning the designation of unsigned preliminary sheets (*An Introduction to Bibliography for Literary Students*, pp.156, 162-63); see also Fredson Bowers, *Principles of Bibliographical Description*, pp. 211-12.

[68] *Elements of Geometrie*, sig.★.j^{r}; Dee's emphasis.

[69] Ibid., sig.★.j^{v}.

[70] Ibid., sigs.★.ij^{v}, ★.$iiij^{r}$; Dee's emphasis.

[71] In "Unknown Quantity," Senn also remarks that *coss* is a name for algebra, from It. *regola di cosa*, which is a translation of Arabic *shai* ("thing; unknown quantity in an equation"); he says nothing of Dee.

[72] *Elements of Geometrie*, sig.π^{r}. The technical description of Dee's coat of arms is quoted from C. H. Josten, trans., "A Translation of John Dee's *Monas Hieroglyphica* (Antwerp, 1564), with an Introduction and Annotations," p.91, n.42.

[73] Josten, trans., p.219. The original is "amen, dicit Litera qvarta Δ: Cui, Devs, Voluntatem Habilitatemque dedit, Diuinum hoc Mysterium, aternis Sic consignare Literarum Monimentis" (Antwerp ed., p.28; in Josten, p.[218]). Josten notes that in a letter to the Emperor Rudolf II, 17 August 1584, Dee styles himself "Triplicis Alphabeti litera Quarta";

the symbolic interpretation of his own name is contained in a letter to William Camden, 7 August 1574 (Josten, p.219, n.130).

[74] Billingsley, sig.☞ij^{r}.

[75] *Elements of Geometrie*, sig.A.iiij^{v}.

[76] *Theatre of the World*, p.5.

[77] See Josten; and Dee, *A True and Faithful Relation of What Passed for Many Yeers between Dr. John Dee (A Mathematician of Great Fame in Q. Eliz. and King James Their Reignes) and Some Spirits . . .* .

[78] *Elements of Geometrie*, sig.π^{v}.

[79] Ibid., sig.a.ij^{v}.

[80] Ibid., sig.★j^{r}.

[81] Ibid., sig.c.iiij^{r}.

[82] Ibid., sig.A.j^{r}.

[83] Ibid., sig.A.j^{v}.

[84] Ibid., sigs.A.j^{r}-A.iij^{r}.

[85] Yates, *Giordano Bruno and the Hermetic Tradition*, pp.148-50. See also her *The Rosicrucian Enlightenment*; and Peter J. French, *John Dee: The World of an Elizabethan Magus*.

[86] For the influence of Dee on Crowley and Victor Neuberg, see Richard Deacon, *John Dee: Scientist, Geographer, Astrologer and Secret Agent to Elizabeth I*, pp.157-70.

[87] *A Vision: An Explanation of Life Founded upon the Writings of Giraldus and upon Certain Doctrines Attributed to Kusta ben Luka* (1925), p.xvii.

[88] *History of Greek Mathematics*, I, 354.

[89] Sarton, *A History of Science: Ancient Science through the Golden Age of Greece*, II, 38.

[90] Budgen, *James Joyce and the Making of 'Ulysses' and Other Writings*, p.291. Ellmann gives a slightly different version of the words (*JJ*, p.490; from an interview with Budgen, 1954).

[91] Heath, *History of Greek Mathematics*, I, 357.

[92] Morrow, trans., *A Commentary on the First Book of Euclid's Elements*, by Proclus, p.xxii.

[93] Senn thinks that "joyclid" also refers to Freud (Ger., "joy")

and that all three men were concerned with elements ("The Aliments of Jumeantry," p.51).

[94] *A Commentary on the First Book of Euclid's Elements*, trans. Morrow, p.59 (Friedlein 72).

[95] *Homer and the Heroic Tradition*, pp.90-91, 100.

[96] Frances M. Boldereff has written a book length study of Bruno and Joyce (*Hermes to His Son Thoth: Being Joyce's Use of Giordano Bruno in 'Finnegans Wake'*). Brian Dibble draws out the affinities between Stephen and Bruno ("A Brunonian Reading of Joyce's *A Portrait of the Artist*"). Ellmann writes that Bruno is a principal context of the first six chapters of *Ulysses* (*Ulysses on the Liffey*, pp.53-56). Norman Silverstein glosses Joyce's debt to Bruno's occult interpretation of the number 67 ("Bruno's Particles of Reminiscence," p.271). See also: Maurice Beebe, "James Joyce and Giordano Bruno: A Possible Source for 'Dedalus'"; Thornton Wilder, "Giordano Bruno's Last Meal in *Finnegans Wake*"; Dalton, "Note," *AWN*, OS, No.7 (Nov. 1962), pp.7-9, and "Re Article by Thornton Wilder (Litter No.6)" (two replies to Wilder); R. J. Hollingdale, "A Note on Joyce and Bruno" (in a further reply to Wilder, he says Bruno represents sterility); Begnal, "The Prankquean in *Finnegan's [sic] Wake*; Henseler, "Vico's Doctrine of *Ricorso* in James Joyce's *Finnegans Wake*," pp.218-19; Ronald J. Koch, "Giordano Bruno and *Finnegans Wake*: A New Look at Shaun's Objection to the 'Nolanus Theory.'"

[97] McIntyre, p.243. In Bruno's *De Principiis Mensvrae et Figvrae Liber*, the titles of the three figures are "Atrivm Apollinis," "Atrivm Minervae," rather than "Palladis" (although there is a subtitle "Fabrica atrii Palladis"), and "Atrivm Veneris" (In *Opera Latine Conscripta*, ed. F. Fiorentino et al., I.3, 278-82 [Caps.iii-v]).

[98] *Giordano Bruno*, p.244, n.1; he cites Bruno's *Articvli Adversvs Mathematicos*, ii. See *Opera Latine Conscripta*, I.3, 19-21, 85 and 78, 80, and 79.

[99] *Opera Latine Conscripta*, III, 407; cited in Lynn Thorndike, *A History of Magic and Experimental Science*, VI, 424.

[100] Dorothea Waley Singer, *Giordano Bruno: His Life and Thought*, p. 74.

[101] Yates, p.355.

[102] Ibid., pp.198-99.

[103] Ibid., p.266. For a discussion of the Neoplatonic belief that all creation is a hieroglyph by which God reveals Himself, see E. H. Gombrich, "*Icones Symbolicae*: The Visual Image in Neo-Platonic Thought." Gombrich draws attention to the visual symbol in magic, which is linked by correspondences to the macrocosm and which *is* the higher essence (pp. 174-76). Discussing Ficino, he writes that "these mathematical shapes and proportions, then, belong to the higher order of things. Shapes and proportions, therefore, have the most intimate connection with the Ideas in

the World Soul or the Divine Intellect" (p.177). Gombrich also thinks that "in the dark recesses of our mind we all believe in image magic" (p.182). Yates connects Bruno's use of the Petrarchan conceit with his belief in the universe as an emblem which adumbrates a higher truth ("The Emblematic Conceit in Giordano Bruno's *De gli eroici furori* and in the Elizabethan Sonnet Sequences," p.108).

[104] Yates speaks of Bruno's "constant deep devotion to the occult philosophy of Cornelius Agrippa" and supplies examples of parallel passages in the works of the two (*Giordano Bruno and the Hermetic Tradition*, p.251 et passim). For summaries of Agrippa's *De Occulta Philosophia* (1533), see: ibid., pp.130-143; Raymond Klibansky, Erwin Panofsky, and Fritz Saxl, *Saturn and Melancholy: Studies in the History of Natural Philosophy, Religion, and Art*, pp.350-60. For Agrippa in *A Portrait of the Artist as a Young Man*, see: Ronald Bates, "The Correspondence of Birds to Things of the Intellect"; Cixous, *Exile of James Joyce*, pp.650-51.

[105] See Yates, *Giordano Bruno and the Hermetic Tradition*. For Hermetism, Hermes, and Thoth in Joyce, see Tindall's important article, "James Joyce and the Hermetic Tradition," especially pp.23, 33-34.

[106] Cap.iii, "Diadis Figvra Digonis," in *Opera Latine Conscripta*, I.2, 349.

[107] Petr Skrabanek, "O Quanta Virtus Est Intersecationibus Circulorum." He quotes from *De Monade Nvmero et Figvra* and states that because of Bruno, Joyce's Diagram takes on a cabbalistic meaning, "being identical with Bruno's Diadis Figura except for Joyce's ALP triangles with their anatomical and geographical connotations" (p.87). However, once the triangles are removed, there is really little left with which to be identical. Skrabanek also says that "intersecting circles are a sign of infinity and Ainsoph."

[108] Bruno, *De Principiis Mensvrae et Figvrae*, Cap.iii, "Fabrica Atrii Apollinis," in *Opera Latine Conscripta*, I.3, 278. For the *Figura Mentis*, see *Articvli Adversvs Mathematicos*, in *Opera*, I.3, 78 and 85.

[109] See also the figure in Bruno's *Libri Physicorvm Aristotelis Explanati*, a diamond labelled with the four elements, qualities, and astrological directions (in *Opera Latine Conscripta*, III, 358).

[110] *Opera Latine Conscripta*, I.3, 20-21; cited in Yates, *Giordano Bruno and the Hermetic Tradition*, p.314.

[111] *Giordano Bruno and the Hermetic Tradition*, p.314; she cites *Opera Latine Conscripta*, I.3, 21.

[112] McIntyre, *Giordano Bruno*, p.141.

[113] Ibid., p.176.

[114] See Isaiah Berlin, "A Note on Vico's Concept of Knowledge," and Antonio Corsano, "Vico and Mathematics," in *Giambattista Vico: An International Symposium*, ed. Giorgio Tagliacozzo et al.; Patrick Gardinar,

"Giambattista Vico," in *The Encyclopedia of Philosophy*, ed. Paul Edwards. In his study of Joyce, Norman O. Brown notices the concept of geometric certainty (*Closing Time*, p.19). Henseler advances the case that the *ricorso* in Joyce implies the evolution of consciousness through knowledge ("Vico's Doctrine of *Ricorso* in James Joyce's *Finnegans Wake*"). For the influence of Vico on Joyce's concept of etymology, see Seán V. Golden, "The Kissier Licence: Liberty at the *Wake*."

[115] Corsano, "Vico and Mathematics," p.431. As far as I am able to determine, only one other critic has remarked the relation of Vico to the geometry in *Finnegans Wake*; Vico's idea that the age of men collapses because of the "barbarism of reflection," or analysis of mores, says Richard Motycka, is literally embodied in the Diagram and its reflected triangles (see "the blushing refluction below," 299.17-.18) ("A Little Night Lesson: Viconian Structure in *FW* II.2," p.109).

[116] Ellmann, *JJ*, p.706. See also the letter in which Joyce writes concerning Vico, "I would not pay overmuch attention to these theories, beyond using them for all they are worth, but they have gradually forced themselves on me through circumstances of my own life" (*Letters*, I, 241, to Harriet Shaw Weaver, 21 May 1926).

[117] Hereafter cited as *Commentary on the First Book*; I use Morrow's translation (1970) throughout. See n.30 in Chapter One of the present study for an explanation of the Friedlein numbers. The only other English version is *The Philosophical and Mathematical Commentaries of Proclus on the First Book of Euclid's Elements* (1792), trans. Thomas Taylor.

[118] Morrow, trans., *Commentary on the First Book*, p.xxxiii. According to Heath, the other main classical source of information about the history of Greek geometry is the *Collection* of Pappus (*Thirteen Books of Euclid's Elements*, I, 29).

[119] *Commentary on the First Book*, pp.56-57 (Friedlein 68). Joyce could have read Euclid's statement in John Sturgeon Mackay, "Euclid," *Encyclopaedia Britannica*, 11th ed.

[120] Senn also notes the allusion ("The Aliments of Jumeantry," p. 52).

[121] Morrow, trans., *Commentary on the First Book*, p.xvi.

[122] E. R. Dodds, trans., *The Elements of Theology*, by Proclus, p. xxv.

[123] *The Elements of Theology* entered the Western Christian tradition as the work of a fictitious follower of St. Paul, Dionysius the Areopagite; in this form, Athenian Neoplatonism influenced Erigena, Aquinas, Descartes, and others. A translation of Proclus' work, under the title *Liber de [XXX] Causis*, was attributed to Aristotle and affected Dante. After the work became known under Proclus' own name in the 12th and 13th centuries, it was read by Eckhart and Nicholas of Cusa. For details, see Dodds' Introduction to his trans. of *The Elements of Theology*, pp.xxvi-xxxiii. Bett notes the close relationship of Erigena, Nicholas

of Cusa, and Bruno (Johannes Scotus Erigena: A Study in Mediaeval Philosophy, pp.103, 192). J. Mitchell Morse thinks that Joyce uses Erigena's philosophy in drawing out the relationships of contraries and the union of male and female (The Sympathetic Alien: James Joyce and Catholicism, p.39).

[124] Commentary on the First Book, p.57 (Friedlein 68); see also p. 58 (70-71).

[125] Ibid., pp.117-18 (146-48).

[126] Ibid., p.15 (17).

[127] Ibid., pp.123-24 (155-56).

[128] Ibid., pp.131-33 (166-68).

[129] Ibid., pp.167-68 (213-14).

[130] Ibid., p.38 (46-47). Morrow thinks that the god referred to is Hermes Trismegistus (p.38, n.88).

[131] Ibid., p.14 (16).

[132] Thirteen Books of Euclid's Elements, I, 2.

[133] History of Science, II, 37.

[134] Commentary on the First Book, pp.xxvi-xxvii.

[135] Edward A. Maziarz and Thomas Greenwood, Greek Mathematical Philosophy, p.243.

[136] Ibid., p.244.

[137] Ibid., pp.255-56.

[138] Ibid., p.230.

[139] Ibid., p.256.

[140] A. Rey, L'Apogée de la science technique grècque (Paris, 1948); L. Brunschvigg, Les Etapes de la philosophie mathématique (Paris, 1947), pp.93-98. Cited in Maziarz and Greenwood, Greek Mathematical Philosophy, p.254.

[141] Science Awakening, pp.195-96.

[142] Oswald Spengler, I, 66.

[143] Herbert Gorman, James Joyce: A Definitive Biography, p.95. See also Ellmann, JJ, pp.124-25.

[144] Books at the Wake, p.234.

[145] For Plato in *Finnegans Wake*, see *Books at the Wake*, pp.272-73. Vico discusses a Platonic utopia, the "eternal natural commonwealth" ruled by a natural aristocracy, in *The New Science of Giambattista Vico*, p.419 (par.1097).

[146] Arland Ussher, *Three Great Irishmen: Shaw, Yeats, Joyce*, p.120.

[147] Hart, *Structure and Motif in 'Finnegans Wake'*, p.129. Cixous merely repeats Hart's conclusions (*Exile of James Joyce*, pp.740-41). According to Joseph Gerard Brennan, "if we were to take Joyce *seriously* as a metaphysician - as George Moore insisted we must - the obvious choice of his exemplar would be Plato, a 'Gnawstick' Plato adept in magic. The vision-epiphanies of his characters, their participation in eternal forms and mythical paradigms, their souls' transmigration in a world where the unreality of time is proved by the Eternal Return - all this is standard Gnostic-Platonic machinery to which Joyce was instinctively attracted. His hero, the gyrovague Bruno, preferred the Grand Artificer of hermetic Platonism to the *Primum Mobile* of Aristotle and Dante. Joyce himself compared his task of constructing *Finnegans Wake* to the cosmic job of the Demiurge of the *Timaeus*" (*Three Philosophical Novelists: James Joyce, André Gide, Thomas Mann*, p.52). For speculation on Thomas Taylor's translation of the *Timaeus*, see H. D. Rankin, "'Taylorised world' (356.10) and Platonism."

[148] In *The Dialogues of Plato*, trans. Benjamin Jowett, 3rd ed., III, 454-55; I employ Jowett's edition and numbering throughout. Hart quotes the same passage from the edition of R. D. Archer-Hind (London, 1888), pp.111-13 (*Structure and Motif*, pp.129-30). According to Yeats, "the first gyres clearly described by philosophy are those described in the *Timaeus* which are made by the circuits of 'the Other' (creators of all particular things), of the planets as they ascend or descend above or below the equator. They are opposite in nature to that circle of the fixed stars which constitutes 'the Same' and confers upon us the knowledge of Universals" (*A Vision* [1937], p.68).

[149] *Structure and Motif*, pp.132-33.

[150] Ibid., p.141.

[151] Ibid., p.144.

[152] In *The Works of Sir Thomas Browne*, I, 219-20.

[153] Henseler says that the ass in *Finnegans Wake* is the hub of the Four and completes the quincunx that is the book itself ("Vico's Doctrine of *Ricorso* in James Joyce's *Finnegans Wake*," p.194).

[154] *Dialogues of Plato*, III, 455. For further discussion of the Same and the Other, see: Jowett's Introduction, III, 390-94; and Heath, *History of Greek Mathematics*, I, 310-12.

[155] See Hart, *Structure and Motif*, pp.130, 132-34; and Tindall, *Reader's Guide to 'Finnegans Wake'*, pp.319-21. Many of Hart's examples

appeared earlier in Atherton, *Books at the Wake*, pp.272-73. For further speculation, see Solomon, *Eternal Geomater*, pp.108-09. Begnal argues that Shem-Berkeley is the real victor and that Shaun-Patrick is victorious in a merely superficial way (Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.106-09). Morse believes that the Berkeley-Patrick dialogue ends in nonsense and that Joyce "thought few people would ever understand Berkeley" ("Proteus," in *James Joyce's 'Ulysses': Critical Essays*, ed. Hart and Hayman, p.36).

[156] *Dialogues of Plato*, III, 394.

[157] *Structure and Motif*, pp.133-34. On Joyce and riddles, see: Benstock, *Joyce-Again's Wake*, pp.205-11; Begnal, in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.102-16; Leo Knuth, "The Ring and the Cross in Joyce's *Ulysses*," in *'Ulysses' cinquante ans après: témoignages franco-anglais sur le chef-d'oeuvre de James Joyce*, ed. Louis Bonnerot, J. Aubert, and Cl. Jacquet, pp.182-83, "Shem's Riddle of the Universe," "Shem's Riddle of the Universe (continued)," and "Shem's Riddle: Addendum"; Patrick A. McCarthy, "Shem's Riddle of the Universe Revisited"; Solomon, "Sham Rocks: Shem's Answer to the First Riddle of the Universe"; Ward Swinson, "Riddles in *Finnegans Wake*" (the riddle as an ornamentative, structural, and thematic device). For the magical aspects of riddles, see Charles Francis Potter, "Riddles," in Maria Leach and Jerome Fried, eds., *Funk and Wagnalls Standard Dictionary of Folklore*.

[158] *Dialogues of Plato*, III, 455-56.

[159] Yeats, p.xxiii.

[160] *Dialogues of Plato*, III, 474 (54).

[161] Ibid., p.322.

[162] Ibid., pp.307 and 322.

[163] Atherton notes this reference to Nicholas of Cusa, but he has little else to add except "there is no evidence that Joyce ever read any of his books" (*Books at the Wake*, p.35).

[164] Edgar Wind, *Pagan Mysteries in the Renaissance*, pp.222-23. He cites Cusa's *De Possest* as the locus of the lesson of the top and adds that the game appears in Francis Quarles, *Emblems* (1635), I, 5, 10 (Wind, p.223, n.18).

[165] *Dialogues of Plato*, III, 128.

[166] Ibid., pp.38-39. Walter Pater refers to Gyges, as well as to the banishment of the myriad-minded poet from the *Republic* (*Plato and Platonism: A Series of Lectures*, pp.128-29, 276), so this book may be an early source of Joyce's and Stephen's knowledge of Plato.

[167] Atherton writes that this passage "combines the Aristophanic joke about divided bodies with Plato's image of 'the divided line' (*Rep.*, 509D), and the 'two circles appointed to go in contrary directions'

(Tim.,39A)" (Books at the Wake, p.273). Without citing Atherton, A. M. Ritchie draws the connection with the "divided line"; he also thinks that "Plutonic" (292.30) implies Plato's cave, which is expounded in the Republic, Bk.VII ("Awake at the Wake, or How To Tell When Not Seeing What is Not is Seeing What Is," p.39). Rankin suggests, improbably to my mind, that "loveliaks" (292.30) may be persons alike in love or affinities like the split person of the Symposium ("Joyce's Remove from Aristotle to Plato," p.12).

[168] Republic, 509, in Dialogues of Plato, III, 211.

[169] Republic, 510, in ibid.

[170] Republic, 511, in ibid., p.213.

[171] Republic, 510 and 511, in ibid., p.212.

[172] Dialogues of Plato, pp.214ff.

[173] Ibid., p.217.

[174] Ibid., p.222.

[175] Ibid., pp.222-23.

[176] Ibid., p.224.

[177] Ibid., p.227. Without explaining her reasons, Solomon says that "Aletheometry" (370.13) suggests "Pythagorean and Platonic beliefs in the mystic qualities of geometry, which Joyce seems to share in his attention to geometric patterns for his god-man symbols" (Eternal Geomater, p.84, n.40).

[178] Dialogues of Plato, III, 235, 236.

[179] Ibid., p.236.

[180] Pater, p.183.

[181] "Joyce's Remove from Aristotle to Plato," pp.12-13. Anthony Burgess thinks that Joyce's puns are appropriate for conveying the sense of dreams and hallucinations (Joysprick: An Introduction to the Language of James Joyce, p.136); his Chap.x, pp.135-61, is entitled "Oneiroparonomastics." According to Brown, "history is paronomastic" (Closing Time, p. 85). On Joyce and puns, see also: William T. Noon, S.J., Joyce and Aquinas, pp.144-60; Erwin R. Steinberg, The Stream of Consciousness and Beyond in 'Ulysses'; Tindall, Reader's Guide to 'Finnegans Wake', pp.7, 18.

[182] Dialogues of Plato, III, 383-84.

[183] Plato's Mathematical Imagination: The Mathematical Passages in the Dialogues and Their Interpretation, p.108. In a note, he says that in Finnegans Wake, "a principle of polyphony or systematic ambiguity is exploited to create lines and phrases with several simultaneous meanings"

(p.108, n.36).

[184] Ibid., p.92.

[185] Republic, trans. Paul Shorey; quoted (and cited incorrectly as 434) in Brumbaugh, Plato's Mathematical Imagination, p.249. Brumbaugh also quotes and discusses Republic, 580, Symposium, 190, and Statesman, 266 as examples of mathematical jokes (ibid., pp.249ff.). Jowett translates the passage concerning the irrational line as, "you would not allow the future rulers to be like posts, having no reason in them, and yet to be set in authority over the highest matters?" (Dialogues of Plato, III, 238).

[186] Brumbaugh, Plato's Mathematical Imagination, pp.250-52.

[187] Ibid., p.251.

[188] Ibid., p.253.

[189] Letters, I, 251, to Harriet Shaw Weaver, 16 April 1927; Joyce's emphasis.

[190] Richard M. Kain lists these locations (Fabulous Voyager: James Joyce's 'Ulysses', p.284).

[191] For a useful discussion of FW,86.34-.35, see Hart, "Nullnull, Medical Square."

[192] Maziarz and Greenwood, Greek Mathematical Philosophy, p.51; Heath, History of Greek Mathematics, I, 220. For a resume of classical references and technical solutions, see Heath, pp.220-35, and his Mathematics in Aristotle, passim.

[193] Greek Mathematical Philosophy, p.51.

[194] Ibid., p.110.

[195] Ibid., p.52: they do not give the exact source from Proclus. They also cite Iamblichus, De Vita Pythagorica, xviii.88.

[196] "Romulus," ix.4 and xi.1-2, in Plutarch's Lives, I, 115 and 119.

[197] Aniela Jaffé, "Symbolism in the Visual Arts," in Jung et al., Man and His Symbols, p.242.

[198] Alchemical Studies, in The Collected Works, XIII, 172. See also John Michell, City of Revelation: On the Proportions and Symbolic Numbers of the Cosmic Temple, p.57 et passim: Michell cites as authorities Lord Raglan, The Temple and the House, and W. R. Letheby, Architecture, Mysticism and Myth, and Architecture, Nature and Magic.

[199] Rudolf Wittkower, Architectural Principles in the Age of Humanism, pp.3-15.

[200] Yates, *Theatre of the World*, p.133.

[201] *Elements of Geometrie*, sigs.c.j^{v}-c.ij^{r}.

[202] Jung, *Psychology and Alchemy*, in *The Collected Works*, XII, 169.

[203] *Alchemical Studies*, in *The Collected Works*, XIII, 86; he is quoting Dorn from the *Theatrum Chemicum . . .* (Argentorati [Strasbourg], 1659-61), I, 506f. On the squared circle as the self, see also Jung, *Aion* and *Mysterium Coniunctionis: An Inquiry into the Separation and Synthesis of Psychic Opposites in Alchemy*, in *The Collected Works*, IX.2, 237, n.45, and 239, and XIV, 544.

[204] *Psychology and Alchemy*, p.124.

[205] Ibid., p.454.

[206] *Aion*, p.243.

[207] See Arthur D. Imerti, trans. and ed., *The Expulsion of the Triumphant Beast*, by Bruno, p.221, n.8.

[208] Bruno, *Expulsion of the Triumphant Beast*, p.221 (iii.2).

[209] *Giordano Bruno*, p.241; he cites *De Minimo*, ii.8 and iii.12.

[210] According to J. O. Wisdom, Berkeley's attack resulted in a modification of the Newtonian theory ("The *Analyst* Controversy: Berkeley as a Mathematician," p.111). In the *Commonplace Book*, Berkeley discusses geometry as a practical art that must be based on *minima sensibilia*, that is, finite and indivisible points, lines, and surfaces; see G. A. Johnston, *The Development of Berkeley's Philosophy*, pp.80-83. Berkeley used the attack as the occasion to turn their own weapon on those who assailed Christianity because it was based on mystery; concepts such as fluxions and infinitesimals, argued Berkeley, were just as mysterious; for details of the controversy, see: Johnston, pp.264-81; and Maziarz and Greenwood, *Greek Mathematical Philosophy*, p.viii. For Berkeley and Joyce, see n.9 in Chapter Two of the present study.

[211] In the Introduction to his "A Treatise of the Method of Fluxions and Infinite Series, with Its Application to the Geometry of Curve-Lines" (London, 1736), Newton says that "those quantities which I consider as gradually and indefinitely increasing, I shall hereafter call *Fluents*, or *flowing Quantities* . . . the velocities by which every Fluent is increased by its *generating motion* . . . I may call *Fluxions*, or simply Velocities, or Celerities" (*The Mathematical Works of Isaac Newton*, I, 49; Newton's emphasis). See also J. Hadamard, "Newton and the Infinitesimal Calculus," in *The Royal Society Newton Tercentenary Celebrations 15-19 July 1946*.

[212] Glasheen notes concerning this passage that Newton thought of Algebra as "Universal History" ("On First Looking into the 11th *Britannica*, 'Algebra: History,'" p.4).

NOTES TO CHAPTER FOUR

[1] *Joyce and Ibsen: A Study in Literary Influence*, pp.146-54. See also James S. Atherton, *The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake'*, pp.155-57, 257.

[2] Fritz Senn notes of *FW*,4.18-5.04 that when a building is completed, a tree, bush, or wreath is traditionally placed at its top ("Bush Abob [5.02]"). Nathan Halper notices other associations with the bush ("Baubletop and Burning Bush [5.02]"). As I show, the burning bush is also a freemasonic image.

[3] For "geasa" (392.24), see n.271 in Chapter Two of the present study. J. A. MacCulloch defines *geis* as "something which ought not to be done for fear of disastrous results, or a binding obligation put on one person by another" ("Celts," in *Encyclopedia of Religion and Ethics*, ed. James Hastings, John A. Selbie, and Louis H. Gray, III, 300). Citing James G. Frazer, Sigmund Freud writes in *Totem and Taboo* that "the ancient kings of Ireland were subject to a number of exceedingly strange restrictions. If these were obeyed, every kind of blessing would descend upon the country, but if they were violated, disasters of every kind would visit it. A complete list of these taboos is contained in the *Book of Rights*, the two oldest manuscript copies of which date from 1390 and 1418. The prohibitions are of the most detailed character, and refer to specific actions at specific places at specific times: the king, for instance, may not stay in a certain town on a particular day of the week; he may not cross a certain river at a particular hour of the day; he may not encamp for nine days on a certain plain, and so on" (in *The Standard Edition of the Complete Psychological Works of Sigmund Freud*, XIII, 46).

[4] According to Pliny, "the Druids . . . hold nothing more sacred than mistletoe" (*Natural History*, IV, 549 [XVI.xcv.249]). See Frazer, *The Magic Art and the Evolution of Kings*, in *The Golden Bough: A Study in Magic and Religion*, Part I, Vol.I, 358, 362. For Joyce and Frazer, see: Atherton, *Books at the Wake*, pp.193, 199; and John B. Vickery, who writes that *Finnegans Wake* is full of "images, figures, and motifs drawn from Frazer" (*The Literary Impact of 'The Golden Bough'*, p.408; see Chaps.x-xiv).

[5] *Early Bardic Literature, Ireland* (1879), pp.77-85 et passim.

[6] *James Joyce and the Making of 'Ulysses' and Other Writings*, p. 294. Also quoted in Harry Levin, *James Joyce: A Critical Introduction*, p.158; and Atherton, *Books at the Wake*, p.173. Noting that Budgen omits the three italicized words from the original passage in De Quincey, Atherton speculates that this is because they would contradict Joyce's theory that the Creator committed the original sin.

[7] My account is taken from Eric Smith, *Some Versions of the Fall: The Myth of the Fall of Man in English Literature*, pp.217-18. See Jung's

critique of Augustine's concept of evil as a privatio boni in Aion: Researches into the Phenomonology of the Self, in The Collected Works of C. G. Jung, IX.2, 47-53, 110.

[8] Power, Conversations with James Joyce, p.108.

[9] For a list of further occurrences of thirty-two in Ulysses, see Richard M. Kain, Fabulous Voyager: James Joyce's 'Ulysses', p.284.

[10] Halper, "11 and 32," p.75; Anthony Burgess, Joysprick: An Introduction to the Language of James Joyce, pp.20-21.

[11] Books at the Wake, pp.142-43; he summarizes some of the more useful commentary on Joyce's use of Augustine. There is an anticipation of Atherton's view in Joseph Campbell and Henry Morton Robinson, A Skeleton Key to 'Finnegans Wake', p.164. Niall Montgomery argues that original sin is the basic doctrine of Finnegans Wake ("The Pervigilium Phoenicis," pp.437ff.); he lists twenty occurrences of the "O felix culpa" motif (p.446, n.25). For other lists, see: William York Tindall, A Reader's Guide to 'Finnegans Wake', p.127; and Clive Hart, Structure and Motif in 'Finnegans Wake', p.236. Montgomery's article is discussed by Bernard Benstock, Joyce-Again's Wake: An Analysis of 'Finnegans Wake', pp.82-83, 211, et passim. For Joyce and Milton, see Helmut Bonheim, Joyce's Benefictions, pp.124-27.

[12] Books at the Wake, pp.31-32.

[13] The Gnostic Religion: The Message of the Alien God and the Beginnings of Christianity, pp.62-63. See also Joseph Katz, "Plotinus and the Gnostics."

[14] Three Philosophical Novelists: James Joyce, André Gide, Thomas Mann, p.29; see also p.52.

[15] A. Walton Litz, "Vico and Joyce," in Giambattista Vico: An International Symposium, ed. Giorgio Tagliacozzo et al., pp.245-46.

[16] The Autobiography of Giambattista Vico, p.111. Joyce speaks of Vico's fear of thunderstorms in the Letters of James Joyce, I, 241, to Harriet Shaw Weaver, 21 May 1926. J. Mitchell Morse says that Vico suffered three falls ("Where Terms Begin/ Book I, chapter i," in A Conceptual Guide to 'Finnegans Wake', ed. Michael Begnal and Fritz Senn, p.4). Hugh Kenner mentions Vico's first fall (Dublin's Joyce, pp.323-24).

[17] Letters, I, 142, 12 July 1920; also quoted in Richard Ellmann, James Joyce, p.494. For further examples of Joyce's fear of thunder and lightning, see: Ellmann, JJ, pp.25, 407, 528, 565, 605, 632, 734; Stanislaus Joyce, My Brother's Keeper, p.40; and Stuart Gilbert, "James Joyce," in James Joyce: Two Decades of Criticism, ed. Seon Givens, p. 463.

[18] Bonheim maintains that Joyce's attacks against religion are concentrated upon God the Father (Joyce's Benefictions, pp.86-88, 97-109).

[19] According to William T. Noon, S.J., Stephen holds with the Sabellians that Father, Son, and Holy Spirit are merely "modes" of God, and this allows him to reject the Thomistic concept of the Triune God; but, says Noon, Stephen's analysis is a reflection of his own poetic impotence, since he cannot father a son in his art (*Joyce and Aquinas*, pp.110, 116, 118, 120).

[20] Discussing the views Noon expresses in *Joyce and Aquinas*, Eugene P. Benson says of Stephen that "having destroyed God's Fatherhood he is condemned to find an *anima* rather than an *animus*, to substitute a female for a male principle. . . . with much truth it could be said of Joyce that he was gynecomorphic through disillusioned Catholicism" ("James Joyce: Orthodoxy and Heterodoxy," p.95; Benson's emphasis).

[21] *Dublin's Joyce*, p.25; see also Bonheim, *Joyce's Benefictions*, pp.46-57 et passim. Kenner advances the view that the Dublin of *Dubliners* was a city of wraiths (p.48), but he also attempts to answer the criticism of *Ulysses* as *nature* *morte* set forth by Wyndham Lewis in the essay "An Analysis of the Mind of James Joyce," a part of *Time and Western Man* (1927) (Kenner, pp.166-68). Lewis writes that Joyce "collected like a cistern in his youth the last stagnant pumpings of victorian anglo-irish life. This he held steadfastly intact for fifteen years or more - then when he was ripe, as it were, he discharged it, in a dense mass, to his eternal glory. That was *Ulysses*" (*Time and Western Man*, p. 109); for the word "*nature-morte*," see pp.107 and 119. For Joyce's replies to Lewis in *Finnegans Wake*, see: Benstock, *Joyce-Again's Wake*, p. 230; Budgen, "Further Recollections of James Joyce," in *James Joyce and the Making of 'Ulysses'*, p.359; Mary Colum and Padraic Colum, *Our Friend James Joyce*, pp.144-47; William F. Dohmen, "'Chilly Spaces': Wyndham Lewis as Ondt"; Adaline Glasheen, "Rough Notes on Joyce and Wyndham Lewis"; and the unsigned note "Time and . . . ."

[22] *Books at the Wake*, p.31. See also: Frederick J. Hoffman, "'The Seim Anew': Flux and Family in *Finnegans Wake*," in *Twelve and a Tilly: Essays on the Occasion of the 25th Anniversary of 'Finnegans Wake'*, ed. Jack P. Dalton and Clive Hart, p.23; and Tysdahl, *Joyce and Ibsen*, p. 148. Donna L. Henseler analyses the ten thunderwords in great detail ("Vico's Doctrine of *Ricorso* in James Joyce's *Finnegans Wake*," pp.68-177). Eric McLuhan sees the thunderwords as the stages of classical rhetoric ("The Rhetorical Structure of *Finnegans Wake*"). See also: M. Bakir Alwan, "Another Interpretation of the Thunderwords in *FW*"; Glasheen, "Part of What The Thunder Said in *Finnegans Wake*"; Kain, "Why is the Thunder a Hundred-letter Word?"; and Ruth von Phul, "Thunderstruck: A Reply to Mrs. Glasheen."

[23] Vico writes that the confusion of tongues and the loss of "the purity of the sacred antediluvian language" applies only to the descendants of Shem, and not to those of Ham and Japeth (*The New Science of Giambattista Vico*, pp.37-38 [par.62]). Later, he gives his explanation of why there are as many languages as peoples; "as the peoples have certainly by diversity of climates acquired different natures, from which have sprung as many different customs, so from their different natures and customs as many different languages have arisen" (p.148 [par.445]).

[24] Tindall says that *Balbulus* is Latin for "stuttering" (*Reader's Guide to 'Finnegans Wake'*, p.33).

[25] Atherton has also noted some of these similarities (*Books at the Wake*, p.174).

[26] For a similar interpretation of these passages, see Campbell and Robinson, *Skeleton Key*, pp.306, 307, nn.23 and 24, p.320. For Stephen Dedalus' interest in Skeat, see *SH*,26.

[27] However, is it possible for colonial states to regain their old languages and cultures? Dick Wilson relates an incident that seems to prove that the language of the conqueror persists long after self-government has been established; "when the nations of Asia and Africa met in 1955 at Bandung to celebrate their freedom and proclaim their common outlook on world problems, twenty-five prime ministers spoke in English, and three in French, throughout the conference. Only one spoke in his own tongue, and that was Chou En-lai, who was criticized for being uncooperative and slowing down the proceedings" (*Asia Awakes: A Continent in Transition*, p.67). Also relevant in this connection is Arnold J. Toynbee's discussion of "archaism" ("a deliberate return to some form of language or style of literature or range of thought and feeling that has fallen into disuse") and the attempts of the Norwegians, Irish, Ottoman Turks, Greeks, and Zionist Jews to revivify dead languages (*A Study of History*, VI, 62-82 [C.i.d.8.γ]).

[28] Ellmann, *JJ*, p.559.

[29] Ibid., p.393.

[30] Hart is of the opinion that "not content with the naturally accelerating flux of the English language as he found it, he helped it to crumble faster. But when Joyce destroyed it was always in order to rebuild" (*Structure and Motif*, p.50). Bonheim compares the disintegration of language in *Finnegans Wake* to the Osiris myth; in both, dismemberment is followed by integration (*Joyce's Benefictions*, p.86).

[31] *Joyce's Benefictions*, p.126; for his discussion of the Fall, see pp.120-27. See also Begnal, in Michael Begnal and Grace Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.88-90.

[32] *His Brother's Keeper*, p.160. See also: Morse, *The Sympathetic Alien: James Joyce and Catholicism*, pp.17-37, 127-39; Hélène Cixous, *The Exile of James Joyce*, pp.355-56. Benstock says Joyce thinks that the fruit of original sin, generation, vindicates woman's act in beginning life (*Joyce-Again's Wake*, p.211).

[33] Quoted in Herbert Gorman, *James Joyce: A Definitive Biography*, p.136.

[34] Although he does not make the connection with Ascension Thursday, Chester G. Anderson does trace in minute detail the parallel between Chapter V of *A Portrait of the Artist as a Young Man* and the events of Easter Week ("The Sacrifical Butter").

[35] S. L. Goldberg suggests that the prostitutes in the "Circe" episode speak this "universal language" (The Classical Temper: A Study of James Joyce's 'Ulysses', p.166). Benson disagrees; he thinks that by "universal language" Joyce means to say that gesture is ritual ("James Joyce: Orthodoxy and Heterodoxy," p.84). See n.51 below.

[36] Quoted in E. L. Hawkins, "Freemasonry," in Encyclopedia of Religion and Ethics, ed. Hastings, Selbie, and Gray, VI, 120.

[37] William Stirling, The Canon: An Exposition of the Pagan Mystery Perpetvated in the Cabala as the Rvle of All the Arts, p.238.

[38] Albert Gallatin Mackey and William R. Singleton, The History of Freemasonry: Its Legends and Traditions, Its Chronological History. The History of the Symbolism of Freemasonry: The Ancient and Accepted Scottish Rite and the Royal Order of Scotland, III, 779, 789-90; hereafter cited as History of Freemasonry. Mackey is the author of the first part of this seven-volume work, Singleton of the second.

[39] Skeleton Key, p.38. They also suggest that the "holypolygon" (339.35; Joyce's emphasis) is a masonic sign (p.221), but I can find no reason to agree.

[40] Mackey and Singleton, III, 789-90.

[41] The Historical Landmarks and Other Evidences of Freemasonry, Explained, II, 466, n.25; see also p.468, n.35. Hereafter cited as Historical Landmarks.

[42] A Concordance to 'Finnegans Wake', p.479, s.v. "freemason."

[43] Books at the Wake, p.67. See also Glasheen, A Second Census of 'Finnegans Wake': An Index of the Characters and Their Roles, s.v. "Masons."

[44] "The Grand Mystery of Free-Masons Discover'd . . . " (London: T. Payne, 1724); quoted in Mackey and Singleton, History of Freemasonry, IV, 930. Discussing the draft of FW,34.34-.47 written before December 1923, M. J. C. Hodgart states that Earwicker, like Bloom, is a freemason, and that his reply to the Cad is evidence of this, because "it is always noon in Masonic ritual" ("The Earliest Sections of Finnegans Wake," p.10).

[45] "Ulysses, Cannibals and Freemasons," p.271.

[46] For Joyce's signs for his characters, see n.179 in Chapter Two of the present work. On secret signs in Ulysses, see: Hugh Staples, "'Ribbonmen' Signs and Passwords in Ulysses"; and Phillip F. Herring, ed., Joyce's 'Ulysses' Notesheets in the British Museum, pp.19-20.

[47] Mackey and Singleton, History of Freemasonry, III, 792-815.

[48] Ibid., III, 816, 826.

[49] *Historical Landmarks*, II, 631.

[50] Bernard E. Jones, *Freemason's Guide and Compendium*, p.517.

[51] "Freemasonic Signs and Passwords in the 'Circe' Episode," p.310. On Joyce, Jousse, and gesture, see: Atherton, *Books at the Wake*, pp.54, 177, 259; and David Hayman, "Language of/as Gesture in Joyce," in *'Ulysses' cinquante ans après: témoignages franco-anglais sur le chef-d'oeuvre de James Joyce*, ed. Louis Bonnerot, J. Aubert, and Cl. Jacquet. See also n.35, above.

[52] *The New Science*, pp.340, 20.

[53] Antoine Fabre d'Olivet, pp.21-28; "The Constitution of Man" appears facing p.xxii.

[54] See Jones, *Freemason's Guide and Compendium*, pp.345-66; and Hawkins, "Freemasonry."

[55] According to the Cooke MS., one of the earliest masonic documents (ca.1400-10), the lords of Egypt felt themselves overburdened with children, and consequently, "they toke here so-/ nys to euclide to gouerne/ hem at his owne wylle &/ he taught to hem the crafte/ [of] masonry and yaf hit þe/ name of Gemetry by cavse/ of þe partynge of þe grounde þat/ he had taught to þe peple/ in the time of þe makyng/ of þe wallys and diches a-/ for-sayd to clawse owt þe/ watyr" (Douglas Knoop, G. P. Jones, and Douglas Hamer, eds., *The Two Earliest Masonic MSS: The 'Regius' MS. (B.M.Bibl.Reg.17A1), The 'Cooke' MS. (B.M.Add.MS.23198)*, p.97, lines 505-16; editors' brackets). The Cooke MS. provides three separate accounts of the origin of freemasonry, while the Regius MS. gives only one (ibid., p.31). According to Hawkins, Euclid is reputed to have established masonry for the purpose of restoring the land markers washed away by the inundation of the Nile; he is of the opinion that there is no historical connection between Egypt and freemasonry ("Freemasonry," p.118). For further commentary on the legend that Euclid invented masonry and geometry in Egypt, see: Mackey and Singleton, *History of Freemasonry*, I, 13-35, 67-71; Florence A. Yeldham, "The Alleged Early English Version of Euclid," especially p.235; and James Orchard Halliwell, "On the Antiquity of Free Masonry in England."

[56] Jones, *Freemason's Guide and Compendium*, pp.449, 451.

[57] Ernest Beha, *A Comprehensive Dictionary of Freemasonry*, p.18.

[58] Ibid.

[59] Jones, pp.459-60.

[60] Beha, p.21.

[61] Jones, p.281.

[62] Anon., *Ritual and Illustrations of Freemasonry* (London, 1837), p. 35; quoted in Schneider, "Freemasonic Signs and Passwords in the 'Circe'

Episode," p.305. See also Jones, Freemason's Guide and Compendium, pp. 464-65.

[63] Jones, p.463.

[64] Ibid., pp.460-61.

[65] William James Hughan, "Freemasonry," Encyclopaedia Britannica, 11th ed., XI, 85. See also Beha, Comprehensive Dictionary of Freemasonry, p.58.

[66] Jones, p.270. See also Beha, p.32.

[67] Beha, p.207.

[68] Jones, pp.316-17, 355, 379.

[69] See Glasheen, Second Census, s.v. "Noah."

[70] Beha, pp.70-72.

[71] Jones, pp.387-93.

[72] Letters, I, 277, 2 December 1928; also quoted in Ellmann, JJ, pp.621-22.

[73] Paul Nettl reviews the extensive critical study of The Magic Flute as masonic (Mozart and Masonry). Technically, the threefold chord, the key of E flat (which has three flats), and certain of the instruments - the corni di bassetti, the clarinets, and the woodwinds - are regarded as freemasonic. The characters of the opera are said to represent real Viennese freemasons, including some of royal stature; see: William Mann, "Die Zauberflöte, K.620, A German Opera in Two Acts: Introduction and Synopsis," in the Angel recording of The Magic Flute (1964); Alfred Einstein, Mozart: His Character His Work, pp.462-68; Kobbé's Complete Opera Book, pp.107-19. Mozart himself was initiated into the lodge "Zur Wohltatigkeit" ("Charity") on 14 December 1784 and was involved with freemasonry for the remainder of his short life.

[74] "Masonry"; she opines that Finnegans Wake will prove to be full of masonic references, but she has nothing else to add, beyond noting that the sign ".˙." (292.12) is the mark of a Master Mason. Joyce explained that what was to become FW,470-71 (a passage I quote at length in Chapter Two) is based on the Maronite (Roman Catholic) liturgy; see Letters, I, 263-64, to Harriet Shaw Weaver, 8 August 1928. Atherton quotes much of the letter (Books at the Wake, pp.188-89), and he explains "Quasi cedrus exaltata sum" in a note entitled "To-Maronite's Wail."

[75] Wolfgang Amadeus Mozart, Die Zauberflöte, in Neue Ausgabe sämtlicher Werke, Ser.II: Buhnenwerke, XIX.5, 194-96; the librettist was Emanuel Schikaneder. I have relied on the English translation which accompanies the Angel recording of The Magic Flute (1964).

[76] Die Zauberflöte, p.191.

[77] *Mozart the Dramatist: A New View of Mozart, His Operas, and His Age*, p.159; see also pp.144-48.

[78] Ibid., pp.166, 187-98.

[79] "*Die Zauberflöte*, K.620, A German Opera in Two Acts: Introduction and Synopsis." Cf. Robert Graves, *The White Goddess: A Historical Grammar of Poetic Myth*.

[80] Mozart, *Die Zauberflöte*, pp.354-55.

[81] Ibid., pp.125-26. The translation is that which accompanies the Angel recording of *The Magic Flute*.

[82] The best account of freemasonry in *Ulysses* is Ulrich Schneider, "Freemasonic Signs and Passwords in the 'Circe' Episode"; see main text, below. Gilbert notes Bloom's masonic oath over Stephen, says there are other masonic references, and quotes Arthur Edward Waite on the magical origin of freemasonry (*James Joyce's 'Ulysses'*, p.297). Budgen also notes Bloom's oath over Stephen (*James Joyce and the Making of 'Ulysses'*, p. 250). Albert attempts to uncover the masonic imagery in the "Lestrygonians" episode; some of what he says is no doubt true, but the article is disordered and confusing, and many of the identifications are forced ("*Ulysses*, Cannibals and Freemasons"). Marvin Magalaner suggests a parallel between the lives of Joyce and Leo Taxil that is strained in the extreme; the Taxil motif is simply not important enough to merit the space he gives it, and he makes questionable statements like "by using Taxil's name in the two places in which it appears in *Ulysses*, Joyce is able unobtrusively - maybe too unobtrusively - to elaborate upon, to justify, and to give depth to his scattered references to the masons" ("Labyrinthine Motif: James Joyce and Leo Taxil," p.181). Too often, Magalaner draws parallels with material Joyce *might* have read. See also his *Time of Apprenticeship: The Fiction of Young James Joyce*, pp.69-70. Tindall notes Nosey Flynn's remark on Bloom's alleged masonry, as well as several other masonic references (*A Reader's Guide to James Joyce*, p. 171 and n.4, pp.191, 210, 214). Norman Silverstein quotes Mackey on the subject of the right hand's possession of the "virtue of fidelity" and applies it to Bloom's comment "Keep to the right, right, right" (*U*,436) ("Magic on the Notesheets of the 'Circe' Episode," p.24). Burgess comments upon Edward VII as a mason and upon the meeting of Stephen and Bloom (*Here Comes Everybody: An Introduction to James Joyce for the Ordinary Reader*, pp.183-84). Weldon Thornton provides some useful identifications (*Allusions in 'Ulysses': An Annotated List*, s.v. "177.28/175.6," "177.40/175.18," et passim); see also Don Gifford and Robert J. Seidman, *Notes for Joyce: An Annotation of James Joyce's 'Ulysses'*. Herring identifies "ashlar" (*Joyce's 'Ulysses' Notesheets in the British Museum*, p. 241, n.39).

[83] *Letters*, I, 177, 6 November 1921. According to Schneider, "Mr. Budgen kindly informed me that he is not sure whether he sent such a book, but he is inclined to think he did not. It seems that Joyce had an independent source, because several allusions to Freemasonry were added before this request ("Freemasonic Signs and Passwords in the 'Circe' Episode," p.311, n.4). His source for the dates of the addition of

masonic allusions is Silverstein's dissertation "Joyce's 'Circe' Episode" (Columbia, 1960); this dissertation is said to draw on material from Leonard Albert's unpublished Master's thesis. I have seen neither.

[84] Schneider suggests the anonymous compilation Ritual and Illustrations of Freemasonry (London, 1837), which is hereafter cited as Ritual and Illustrations, as a source ("Freemasonic Signs and Passwords in the 'Circe' Episode," p.304). Albert proposes Walter Marsham Adams, The House of Hidden Places: A Clue to the Creed of Early Egypt from Egyptian Sources (London: John Murray, 1895); a copy of this book in the Yale library is signed by Joyce and dated 1901 ("Ulysses, Cannibals and Freemasons," p.273).

[85] Schneider, p.307. One might add that freemasonry was suspect in Ireland because of its associations with the British Crown. The Citizen calls Bloom "that bloody freemason" (U,300) just after mentioning the royal titles of Queen Victoria; this juxtaposition indicates that he suspects Bloom of being a British sympathizer. In "Circe," Edward VII is burlesqued as a mason (U,590). Maud Gonne MacBride relates that she became convinced, despite Yeats's assurances to the contrary, that the Order of the Golden Dawn, to which she belonged until that time, was a freemasonic and, hence, British organization (A Servant of the Queen: Her Own Story, p.249). See also: Ellic Howe, The Magicians of the Golden Dawn: A Documentary History of a Magical Order 1887-1923, p.71; and Virginia Moore, The Unicorn: William Butler Yeats' Search for Reality, p. 157. The customary account of the origin of the Golden Dawn confirms Maud Gonne's suspicions. In 1884, Rev. A. F. A. Woodford is said to have discovered certain coded manuscripts, either in a bookstall in Farrington Street or in a cupboard in a masonic hall. In 1887, Dr. William Wynn Westcott translated these MSS and, with S. L. MacGregor Mathers, expanded them into the rituals of the Golden Dawn, which was formed on 1 March 1888, with Westcott, Mathers, and Dr. Woodman as chiefs; all three men, along with most of the members, were masons (R. G. Torrens, The Secret Rituals of the Golden Dawn, pp.25, 219; Howe, Magicians of the Golden Dawn, p.1). A complete study of Joyce's knowledge of Yeats in relation to the Golden Dawn is required (see nn.193, 195, 198, 199 in Chapter Two of the present study); I point out the masonic connections with the Order to suggest the possibility that Joyce learned something of freemasonry from Yeats and his circle. Glasheen thinks Westcott is named in Finnegans Wake as "coat's wasting" (411.31) ("The Yeats Letters and FW"); to my mind, this identification is merely possible.

[86] Mackey and Singleton, History of Freemasonry, III, 865.

[87] Schneider, pp.304-05. He thinks that the exchange with the figure is not itself masonic.

[88] Ibid., p.305; his source is Ritual and Illustrations, p.35.

[89] Schneider, p.305; original emphasis.

[90] Ibid., p.306; his source is Ritual and Illustrations, passim.

[91] Schneider, p.308; his source is Ritual and Illustrations, p.196.

[92] Schneider, p.308; his authority is Brewer's Dictionary of Phrase and Fable, s.v. "up."

[93] Structure and Motif, p.245.

[94] Schneider, p.309; he is quoting Ritual and Illustrations, p.167.

[95] As Glasheen points out, Zerubbabel is combined with Sir Jonah Barrington (Second Census, s.v. "Barrentone" and "Barrington").

[96] Thornton, Allusions in 'Ulysses', s.v. "177.40/175.18." This information can be found in Hughan, "Freemasonry," Encyclopaedia Britannica, 11th ed., XI, 84, n.1.

[97] For the signs of the Past Master, see Schneider, p.305.

[98] History of Freemasonry, I, 41-42.

[99] Ibid., III, 865.

[100] According to Oliver, the compasses are the emblem of H.A.B., one of the three Grand Masters who built the first Temple; they signify the wisdom, truth, and justice of God in "assigning to mankind a due proportion of pleasure and pain"; as the working tool of a Master, the compasses symbolize the limits and proportions of moral duty (Historical Landmarks, II, 353, n.16, and 158, n.49). Alec Mellor repeats some of this information, adding that the compasses have many different senses, according to the rite and grade. Generally, the compasses symbolize the Old Testament, the square the New. Mellor disagrees with Mackey's interpretation of the compasses as the high grades and the square as the inferior grades (Dictionnaire de la franc-maçonnerie et des francs-maçons, p.100).

[101] Joyce may have other associations in mind; see Prov. 8:27. For the compasses in Blake, see Anthony Blunt, "Blake's 'Ancient of Days': The Symbolism of the Compasses."

[102] Jones, Freemason's Guide and Compendium, p.435.

[103] Oliver notes that the square, the second of the three emblems of the three Grand Masters, represents the power of Hiram, who assisted in the building of Solomon's Temple (Historical Landmarks, II, 353, n. 16). Mellor says that because of its firm sides, the square is the sign of morality (Dictionnaire de la franc-maçonnerie, p.118).

[104] Mellor, p.185.

[105] For a review of the cube-imagery in Finnegans Wake and a solution that suffers from too much ingenuity, see Margaret C. Solomon, Eternal Geomater: The Sexual Universe of 'Finnegans Wake', pp.113-23. I find dubious her citation of P. D. Ouspensky's Tertium Organum and A New Model of the Universe as authorities on the fourth dimension because "Joyce 'romanticizes' scientific concepts in an analogous way" (ibid., p.153, n.52).

[106] The Canon, p.63; he also speaks of a diagram given by Athanasius Kircher and others, in which the ten Sephiroth of the Cabbala are enclosed in a double cube. This passage from Stirling is also quoted in Frater Achad, The Anatomy of the Body of God: Being the Supreme Revelation of Cosmic Consciousness, pp.24-25; see his Fig.XV. According to Oliver (quoting Willoughby), the Cross of Christ is associated with the double cube and the triple tau; he supplies diagrams which portray: a double cube inside two circles which intersect to form a vesica piscis; a cross superimposed upon the two circles enclosed in a rectangle; and a triple tau superimposed upon a partial representation of the two circles and the rectangle (Historical Landmarks, II, 637, n.64). See also Jones, Freemason's Guide and Compendium, p.517. Oliver also says that the altar of incense, the pedestal, and the foundation stone of the tabernacle were double cubes; the Delphic Oracle is said to have advised the double cube as a remedy for pestilence (Historical Landmarks, II, 301).

[107] Beha, Comprehensive Dictionary of Freemasonry, p.168; Jones, Freemason's Guide and Compendium, p.421.

[108] Mellors, Dictionnaire de la franc-maçonnerie, p.106; Jones, pp.190, 313.

[109] History of Freemasonry, III, 865.

[110] Ibid., VII, 1742.

[111] Ibid., p.733; see also III, 801.

[112] Stirling, The Canon, pp.11-12; John Michell, City of Revelation: On the Proportions and Symbolic Numbers of the Cosmic Temple, p.72.

[113] Euclid, The Elements of Euclid: For the Use of Schools and Colleges, ed. Isaac Todhunter and S. L. Loney, p.25.

[114] Klein, "Magister-Mathesios," Trans. Quatuor Coronati Lodge, 23 (1910), 107-51; quoted in Achad, Anatomy of the Body of God, pp.7-8; original emphasis.

[115] Michell suggests that since the circles of the Same and the Other cannot be conceived as one circle inside another because they are of equal size, the proper figure to illustrate the duality in Plato's cosmology is the vesica piscis (City of Revelation, p.87; see Fig.27).

[116] "Discrep.," p.109; quoted, without further bibliographical details, in Stirling, The Canon, p.12; the passage is also quoted, from The Canon, in Achad, Anatomy of the Body of God, p.23.

[117] Historical Landmarks, II, 637, n.64; he is quoting Willoughby but does not provide a source.

[118] Ibid., pp.800, 808.

[119] Thomas Kerrich, "Observations on the Use of the Mysterious

Figure, called Vesica Piscis, in the Architecture of the Middle Ages, and in Gothic Architecture," pp.353-63; see Plate XXXI, Figs.53-55. Kerrich's remarks are also cited and quoted in Stirling, The Canon, p.12; the entire passage from Stirling is in turn quoted in Achad, Anatomy of the Body of God, pp.22-23.

[120] Serlio, fol.11^{v} [I.i]. Albrecht Dürer's concern with the vesica piscis is often noted; see: Kerrich, "Observations on the Mysterious Figure," p.355; John Henry Parker, A Glossary of Terms Used in Grecian, Roman, Italian, and Gothic Architecture, s.v. "Vesica Piscis"; Stirling, The Canon, p.12; Mackey and Singleton, History of Freemasonry, III, 801. The vesica piscis can be seen in three of Dürer's woodcuts: "Last Supper" (1510), part of the "Large Passion" series (Dürer, Dürer in America: His Graphic Work, Plate 123); "St. John before God and the Elders," part of the "Apocalypse" series (1496-98) (Dürer in America, Plate 94; and Dürer, Albrecht Dürer: Master Printmaker, Plate 31); and "The Adoration of the Lamb," also part of the "Apocalypse" series (Albrecht Dürer: Master Printmaker, Plate 44). Erwin Panofsky reports that Dürer referred to the vesica piscis (Panofsky does not use the term) as Fischblase ("fish's bladder") and as der neue Mondschein ("crescent") (The Life and Art of Albrecht Dürer, p.245).

[121] In "Re 293, the Geometrical Figure," Glasheen simply quotes the short article "Fish" from the 11th ed. of the Encyclopaedia Britannica, adding only that Joyce may mean the vesica piscis as a virginity symbol, because of the proximity to the Diagram of the word "Mary" (293.10); presumably, she is referring to the word "marymyriameliamurphies" (293.10-.11). In "Almonds and Keys," Knuth discusses the amande mystique, or mandorla, alternate names for the vesica piscis considered as an almond; he interprets the form as a symbol of the reconciliation of opposites, as well as of the yoni and of sacrifice and renewal, and thinks Joyce refers to it in "Elders fall for green almonds" (64.36). In Chapter Five, I consider the vesica piscis as a female symbol, so what they say is correct.

[122] Mackey and Singleton, History of Freemasonry, I, 63, 73.

[123] Ibid., pp.20, 53-62.

[124] Jones, Freemason's Guide and Compendium, pp.298-301. According to Mellor, the letter G symbolizes "la rectitude des conceptions théoriques" (Dictionnaire de la franc-maçonnerie, p.100).

[125] Albert, "Ulysses, Cannibals and Freemasons," p.271.

[126] Glasheen, Second Census, s.v. "Salmosalar"; Tindall, Reader's Guide to 'Finnegans Wake', p.35. Patricia A. Morley discusses Shem as salmon and fish, emphasizing the positive, redemptive aspects of the symbol ("Fish Symbolism in Chapter Seven of Finnegans Wake: The Hidden Defence of Shem the Penman"). Bonheim connects the fish with A.L.P. and life (Joyce's Benefictions, p.101); see also Frances M. Boldereff, Reading 'Finnegans Wake', Part I, p.146.

[127] See Lady Augusta Gregory, ed. and trans., Gods and Fighting

Men: The Story of the Tuatha de Danaan and of the Fianna of Ireland, p. 162. For an account of the salmon of miraculous size caught by St. Columba, see Saint Adamnan, *Adomnan's Life of Columba*, pp.364-67 [II.xix. 67a-b], and the editors' note, p.70.

[128] *A Display of Heraldrie: Manifesting a More Easie Access to the Knowledge Therof than Hath Hitherto Been Published by Any, through the Benefit of Method*, p.313 [IV.xi]; he cites Sir John Ferne as his authority.

[129] It is the sign of marriage because it signifies astronomical conjunction; see Stirling, *The Canon*, p.13; he quotes Edward Clarkson. The relevant passage in Stirling is quoted in Achad, *Anatomy of the Body of God*, pp.23-24.

[130] Jean Chevalier, *Dictionnaire des symboles: mythes, rêves, coutumes, gestes, formes, figures, couleurs, nombres*, s.v. "Mandorle." See also Michell, *City of Revelation*, p.74.

[131] "Fish," *Encyclopaedia Britannica*, 11th ed. A classic study of the fish symbol is Jung's *Aion*, in *The Collected Works*, IX.2; see especially Chaps.vi, viii-xi. Jung doubts whether the association of 'ιχθύς with Christ is merely anagrammatic (*Aion*, p.72; see also pp.89-90, 182-83). Michell supplies some interesting examples of gematria in this connection (*City of Revelation*, pp.90-91). Morse has also drawn attention to the Christ-'ιχθύς relation, and connects it with Stephen's meditation, "God becomes man becomes fish becomes barnacle goose becomes featherbed mountain" (*U*,50) ("Proteus," in *James Joyce's 'Ulysses': Critical Essays*, ed. Hart and Hayman, p.47).

[132] Jung, *Aion*, p.113; he quotes Augustine's *Confessions* as authority. The fish is also a symbol of baptism; Tertullian writes that "we, little fishes, are born in water according to our Fish (Ἰχθύς), Jesus Christ" (quoted in Arnold Whittick, *Symbols: Signs and Their Meaning and Uses in Design*, p.242).

[133] Thomas Inman, *Ancient Faiths Embodied in Ancient Names: or An Attempt to Trace the Religious Belief, Sacred Rites, and Holy Emblems of Certain Nations by an Interpretation of the Names Given to Children by Priestly Authority, or Assumed by Prophets, Kings, and Hierarchs*, II, 916-17. See also (listed in order of publication): Parker, *A Glossary of Terms*, s.v. "Vesica Piscis"; Père Charles Cahier, *Caractéristiques des saints dans l'art populaire*, s.v. "Christ"; Stirling, *The Canon*, pp. 13, 196; "Fish," *Encyclopaedia Britannica*, 11th ed.; Gerard Gietmann, "Nimbus," in *The Catholic Encyclopedia* (1907-12), ed. Charles G. Herbermann et al.; Achad, *Anatomy of the Body of God*, pp.7-8, 24; E. E. Malone, "Aureole (Nimbus)," in *New Catholic Encyclopedia* (1967), ed. Most Rev. William J. McDonald et al.; Heather Child and Dorothy Colles, *Christian Symbols Ancient and Modern: A Handbook for Students*, p.194; Michell, *City of Revelation*, pp.15, 72.

[134] For a note on "apexojesus," see Boldereff, *Reading 'Finnegans Wake'*, Part I, pp.142-43. See also n.205 in Chapter Two of the present study.

[135] Quoted in Jones, Freemason's Guide and Compendium, pp.518-19.

[136] Ibid., pp.519-20. M. Gaster adds that Solomon used the Seal to control demons, or shēdim, who performed the actual work ("Divination [Jewish]," in Encyclopedia of Religion and Ethics, IV, 811). For Solomon as a magician, see Ernst von Dobschütz, "Charms and Amulets (Christian)," in Encyclopedia of Religion and Ethics, III, 424-25.

[137] History of Freemasonry, III, 800. Oliver reviews meanings of the Seal from various parts of the world (Historical Landmarks, II, 355-57).

[138] Jones, p.519.

[139] For Boehme, the upper triangle represents Adam and fire, and the lower triangle Christ and water or light; their union or "Temperature" is Solomon's Seal. See The Works of Jacob Behmen, ed. William Law (London, 1764), II, 30-31; cited in Harbans Rai Bachchan, W. B. Yeats and Occultism: A Study of His Works in Relation to Indian Lore, the Cabbala, Swedenborg, Boehme and Theosophy, p.135. Bachchan also discusses the Cabbalists and Law; for the former, the upper triangle is Chokmah, or fire, the lower Binah, or water, and their union Kether, or mildness; Law's interpretation is similar (ibid., p.246). The Theosophists call the union of the upper (spirit) and the lower (matter) triangles "the manifestation of the Deity in time and space" (ibid.; he cites: E. L. Gardner, "The Seal of the Society and Its Symbolism" [1946]; the Society card; and Lucifer, 15 February 1888, p.483).

[140] Letters on Poetry from W. B. Yeats to Dorothy Wellesley, p.95, 5 August [1936].

[141] See Bachchan, W. B. Yeats and Occultism, Appendix VI, folding sheet between pp.288 and 289.

[142] For the ballad of "Finnegan's Wake," see Ellmann, JJ, pp.556-57, n.

[143] Inman, Ancient Pagan and Modern Christian Symbolism, p.32.

[144] "Solomon's Seal," in Difficult Questions, Easy Answers, pp. 176-78. As evidence of man's reliance on woman for his health, he adduces the ancient Egyptian architectural dictum that a pyramid is supported by another, inverted pyramid beneath it.

[145] An Encyclopedic Outline of Masonic, Hermetic, Qabbalistic, and Rosicrucian Symbolical Philosophy: Being an Interpretation of the Secret Teachings Concealed within the Rituals, Allegories and Mysteries of All Ages, p.CXLVI; see Table II, Figs.24, 25.

[146] Glasheen gives the last three identifications (Second Census, s.v. "Balkis").

[147] Bonheim states that the fish is clearly phallic; he also remarks a goat-fish relation, without mentioning Capricorn (Joyce's

Beneficitions, pp.89, 101).

[148] Glasheen, Second Census, s.v. "Solomon, Dr Bethel."

[149] Waite, The Holy Kabbalah: A Study of the Secret Tradition in Israel as Unfolded by Sons of the Doctrine for the Benefit and Consolation of the Elect Dispersed through the Lands and Ages of the Greater Exile, p.314.

[150] Jones, Freemason's Guide and Compendium, p.312.

[151] Ibid., pp.489-91. Glasheen also has noted that acacia is a freemasonic plant (Second Census, s.v. "Acacius"). The acacia symbolism is not, however, unique to freemasonry.

[152] Jones, p.517.

[153] Ibid., p.513; his authority is Lionel Vibert, "The Interlaced Triangles of the Royal Arch," Miscellanea Latomorum, 21 (1932).

[154] Jones, pp.523-25; he cites Mackey and Vibert without supplying precise bibliographical details.

[155] I believe that Montgomery was the first to point out this fact ("The Pervigilium Phoenicis," p.443).

NOTES TO CHAPTER FIVE

[1] Neumann, p.139; see Plate 53. For the story of Baubo, see Thomas Inman, *Ancient Pagan and Modern Christian Symbolism*, p.66. Dennis Burton associates the Eng. *cunt* with Sanskrit *kuṇdalinī* (see main text, below) and Kun, the Hindu Venus ("Social Protest and the Heraldic Woman," pp. 61-62); see the reproductions of his paintings which accompany the article.

[2] Neumann, *Great Mother*, pp.139-41; see Fig.25, Plates 54 and 51.

[3] Inman, *Ancient Pagan and Modern Christian Symbolism*, pp.66, 78.

[4] Ibid., pp.8, 12, 16, 78, 88.

[5] Manly P. Hall, *An Encyclopedic Outline of Masonic, Hermetic, Qabbalistic, and Rosicrucian Symbolical Philosophy: Being an Interpretation of the Secret Teaching Concealed within the Rituals, Allegories and Mysteries of All Ages*, p.XLIX; Hargrave Jennings, *The Rosicrucians: Their Rites and Mysteries*, I, 187.

[6] Robert Freke Gould, *The History of Freemasonry: Its Antiquities, Symbols, Constitutions, Customs*, I, 460.

[7] Neumann, *Great Mother*, p.145 and Plate 62.

[8] John Michell, *City of Revelation: On the Proportions and Symbolic Numbers of the Cosmic Temple*, p.72.

[9] William Stirling, *The Canon: An Exposition of the Pagan Mystery Perpetvated in the Cabala as the Rvle of All the Arts*, p.13; the passage from Stirling is paraphrased, without precise attribution, in Frater Achad, *The Anatomy of the Body of God: Being the Supreme Revelation of Cosmic Consciousness*, p.23. Stirling says that the *vesica piscis* is equivalent to the fusil, mascle, lozenge, and rhombus; he cites as authority John Guillim, *A Display of Heraldrie: Manifesting a More Easie Access to the Knowledge Therof than Hath Hitherto Been Published by Any, through the Benefit of Method*, 4th ed. (London, 1660), p.354 (IV.xix). As far as I have been able to determine through examination of Guillim's work, no mention is made of the *vesica piscis* or of a feminine shield; Guillim does provide an illustration of a fusil with curved sides, after Chassaneus (ibid., p.354), and Stirling probably took this figure, which is too narrow to be one, for a *vesica piscis*.

[10] Stirling, *The Canon*, p.13; his remark is also quoted in Achad, *Anatomy of the Body of God*, p.24. See also Eugène de Seyn [Eug. Droulers], *Dictionnaire des attributs, allégories, emblèmes, et symboles*, s.v. "Amande mystique."

[11] Seyn, s.v. "Amande mystique."

[12] *Ancient Pagan and Modern Christian Symbolism*, p.91; the woodcut is reproduced as Fig.137. Inman also discusses the woodcut and gives it as Fig.47 in *Ancient Faiths Embodied in Ancient Names: or An Attempt to Trace the Religious Belief, Sacred Rites, and Holy Emblems of Certain Nations by an Interpretation of the Names Given to Children by Priestly Authority, or Assumed by Prophets, Kings, and Hierarchs*, II, 647-49. Madame Blavatsky quotes Inman's remarks from the latter work and observes, "how sadly disfigured - applied as they were to the grossest anthropomorphic conceptions - have, under Christian interpretation, become the noblest and grandest, as the most exalted, ideas of Deity of the Eastern Philosophy!" (*The Secret Doctrine: The Synthesis of Science, Religion, and Philosophy*, II, 41). The woodcut from the Rosary of the B.V.M. is also reproduced as Fig.87 in Carl Jung, *Psychology and Alchemy*, in *The Collected Works of C. G. Jung*, XII, 179.

[13] *Ancient Pagan and Modern Christian Symbolism*, p.92; the woodcut is reproduced as Fig.138. Inman also discusses the woodcut and gives it as Fig.48 in *Ancient Faiths Embodied in Ancient Names*, II, 647-49.

[14] *Ancient Pagan and Modern Christian Symbolism*, pp.104-05; see Fig.172.

[15] Raphaell Holinshed, *Chronicles* (1587), III, 1257; original emphasis; quoted and discussed in William M. Schutte, *Joyce and Shakespeare: A Study in the Meaning of 'Ulysses'*, pp.174-75.

[16] Peter Giles, "Alphabet," *Encyclopaedia Britannica*, 11th ed., I, 727.

[17] Inman, *Ancient Pagan and Modern Christian Symbolism*, p.12; the *yoni* emblem is reproduced in Plate X, Fig.6 and is taken from Mook's *Hindu Pantheon*. For the Etruscan design, he cites F. A. David, *Antiquités étrusques . . .* (Paris, 1785), V, Plate XLV.

[18] A. C. Fox-Davies, *A Complete Guide to Heraldry*, p.113; Francis J. Grant, ed., *The Manual of Heraldry: ~~A Concise~~ Description of the Several Terms Used, and Containing a Dictionary of Every Designation in the Science*, p.103; "Lozenge," *Encyclopaedia Britannica*, 11th ed.

[19] Fox-Davies, *Complete Guide to Heraldry*, p.114, n.58. For the similarity of lozenge, fusil, mascle, rustre, and rhombus, see: Fox-Davies, p.113; and Guillim, *Display of Heraldrie*, p.353. Joyce's extensive use of heraldry in *Finnegans Wake*, which demands a full study, may owe something to Vico's theory that the second of the three stages of language "was by heroic blazonings, with which arms are made to speak" (*The New Science of Giambattista Vico*, p.340 [par.930]). For a few remarks on heraldry in *Finnegans Wake*, see James S. Atherton, *The Books at the Wake: A Study of Literary Allusions in James Joyce's 'Finnegans Wake'*, pp.32-34, 54.

[20] Kirby Flower Smith, "Magic (Greek and Roman)," in *Encyclopedia of Religion and Ethics*, ed. James Hastings, John A. Selbie, and Louis H. Gray, VIII, 282.

[21] Pennethorne Hughes, Witchcraft, p.41.

[22] Letters of James Joyce, I, 213, to Harriet Shaw Weaver, 24 March 1924.

[23] Finnegans Wake Holograph Workbook, MS.VI.B.1, p.[65], Wickser Collection, Lockwood Library, University of Buffalo, Buffalo, New York. For a bibliographical description, see Peter Spielberg, comp., James Joyce's Manuscripts and Letters at the University of Buffalo: A Catalogue, pp.97-98; he dates the Workbook ca.1922-24. The note in question is not crossed through by Joyce and consequently reappears in Finnegans Wake Transcription of Workbook, MS.VI.C.3 (ca.1933-35), Wickser Collection; for bibliographical description, see Spielberg, pp.131-32.

[24] "Anna Livia's Delta." See also: William York Tindall, James Joyce: His Way of Interpreting the Modern World, p.67, and A Reader's Guide to 'Finnegans Wake', pp.141, 180; Robert Martin Adams, James Joyce: Common Sense and Beyond, p.181; Bernard Benstock, Joyce-Again's Wake: An Analysis of 'Finnegans Wake', pp.26-27.

[25] See Tindall, Reader's Guide to 'Finnegans Wake', p.141. See also n.232, below.

[26] Atherton shows that the title of every story in Dubliners is named in Finnegans Wake (Books at the Wake, pp.106-07).

[27] Inman, Ancient Faiths Embodied in Ancient Names, I, 107; Mircea Eliade, The Forge and the Crucible, p.42.

[28] Eliade, The Forge and the Crucible, p.42.

[29] Ibid., pp.41-42; his authorities are Fick, and R. Eisler, "Kuba-Kybele," Philologus, 68 (1909), 127, 135ff. For an annotated bibliography, see Eliade, Note F, "Sexual Symbolism of the Triangle," p.207.

[30] Neumann, Great Mother, pp.101-03.

[31] Books at the Wake, p.276. In his short monograph Joyce et Rabelais: aspects de la création verbale dans 'Finnegans Wake', Claude Jacquet makes no mention of this passage.

[32] Eliade, The Forge and the Crucible, p.21; he cites as authority W. F. Jackson Knight, Cumaean Gates (Oxford, 1936), p.101. Philip L. Graham retells the following joke in relation to FW,229.23-.24. A small boy saw his sister in the bath and asked about the anatomical differences; the sister said, "oh, I was hit with an axe there"; the boy replied, "that's too bad, and right in the c..t too" ("Kinsey Spreads the Bawd," p.5).

[33] Eternal Geomater: The Sexual Universe of 'Finnegans Wake', pp. 50-57 et passim.

[34] Neumann, p.46. See also Inman, Ancient Faiths Embodied in Ancient Names, I, 107-08.

[35] Neumann, *Great Mother*, p.158.

[36] *Ancient Pagan and Modern Christian Symbolism*, p.127; he is quoting John Newton. For the Ashtaroth symbol, see his Figs.176 and 177. Artemisias Prothuraia is invoked in the first Orphic Hymn. See also Robert Graves, *The White Goddess: A Historical Grammar of Poetic Myth*, p. 176.

[37] *Books at the Wake*, p.193.

[38] For other discussion of these passages, see Solomon, *Eternal Geomater*, p.50.

[39] *Reader's Guide to 'Finnegans Wake'*, p.54.

[40] Quoted in *Osiris: The Egyptian Religion of Resurrection*, I, 63; my emphasis, his parenthetical remark.

[41] *Great Mother*, p.158.

[42] *Eternal Geomater*, p.4.

[43] Bjørn J. Tysdahl locates some references to *A Doll's House* in *Finnegans Wake*, but 20.17-.18 is not among them (*Joyce and Ibsen: A Study in Literary Influence*, pp.171-72).

[44] Quoted in Frank Budgen, "James Joyce," in *James Joyce: Two Decades of Criticism*, ed. Seon Givens, p.24. Also quoted in Richard Ellmann, *James Joyce*, p.559.

[45] Inman, *Ancient Pagan and Modern Christian Symbolism*, p.127; he is quoting John Newton. Herodotus is cited as the source of the remark on χάμινος (*History*, V.xcii.7); see Henry Cary's translation, p.344.

[46] *Ancient Pagan and Modern Christian Symbolism*, p.128; he is quoting John Newton.

[47] For the myth of the phoenix, see: R. van den Broek, *The Myth of the Phoenix According to Classical and Early Christian Traditions*; Neumann, *Great Mother*, pp.240-41.

[48] *Great Mother*, p.19, n.2.

[49] Ibid., pp.108, 111.

[50] Ibid., p.112; see Fig.5.

[51] Ibid., p.124, n.19; see Plate 20.

[52] Marshall McLuhan writes that Joyce's "techniques for managing the flow of messages in his network were taken from the traditional disciplines of grammar, logic, rhetoric, on the one hand, and of arithmetic, geometry, music, and astronomy, on the other" ("James Joyce: Trivial and Quadrivial," p.75); McLuhan is concerned mainly with rhetoric.

For the liberal arts, see: Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, pp.36-39; Raimond Van Marle, *Iconographie de l'art profane au Moyen-âge et à la Renaissance et la décoration des demeures*, II, Chap.iii.

[53] Emile Mâle notes that these emblems, along with a tablet, are found in the representation of Geometry in almost every cathedral; he remarks that the figure of Geometry in the west porch of Chartres Cathedral is likely Euclid (*Religious Art in France XIII Century: A Study in Mediaeval Iconography and Its Sources of Inspiration*, pp.85, 89).

[54] *The Quadrivium of Martianus Capella: Latin Traditions in the Mathematical Sciences*, in *Martianus Capella and the Seven Liberal Arts*, I, 148 (vi.723-24). The editor, William Harris Stahl, notes that Martianus Capella's work, properly entitled *De Nuptiis Philologiae et Mercurii*, was the most popular textbook of the Middle Ages (pp.21, 22).

[55] *Dante's Convivio*, pp.110-11.

[56] Raymond Klibansky, Erwin Panofsky, and Fritz Saxl, *Saturn and Melancholy: Studies in the History of Natural Philosophy, Religion, and Art*, pp.312-15; the woodcut from Reisch is reproduced as Plate 104. For Reisch, see n.213 in Chapter Two of the present study. Klibansky, Panofsky, and Saxl note that Reisch's woodcut is "extraordinarily akin" to Dürer's *Melencolia I*; in their opinion, Dürer's famous portrait of Geometry Perplexed combines an *ars geometrica* with a *homo melancholicus* (pp.313-15, 317). Although geometry was originally assigned to Mars, Jupiter, or Mercury, it gradually became the province of Saturn (ibid., pp.333-35); see Plate 40 in *Saturn and Melancholy* for Saturn as Geometry according to the Tübingen MS. Two of Joyce's six uses of the word "melancholy" in *Finnegans Wake* (97.33, 449.01) are in close proximity to references to Saturn, but there does not seem to be any overt mention of geometry. In *Tertius Interveniens* (1610), Johannes Kepler writes that "in this lower world, that is to say the globe of the earth, there is inherent a spiritual nature, capable of *Geometria*, which *ex instinctu creatoris, sine ratiocinatione* comes to life and stimulates itself into a use of its forces through the geometrical and harmonious combination of the heavenly rays of light" (*Joannis Kepleri Astronomi Opera Omnia*, ed. C. Frisch [Frankfurt and Erlangen, 1858-71], I, 605ff. [64]; quoted in Jung, *The Structure and Dynamics of the Psyche*, in *The Collected Works*, VIII, 496).

[57] *The Poems of John Cleveland*, p.41, lines 39-47.

[58] *The Intellectual Development of John Milton*, II, 263. Brian Morris and Eleanor Withington, the editors of *The Poems of John Cleveland*, note (p.133) that Fuller's oration is published in *Seventeenth Century News*, 13 (Summer 1955), 27-28; the oration is analyzed in William F. Costello, "A Cambridge Prevaricator in the Earlier Seventeenth Century," *Renaissance News*, 8 (Winter 1955), 179-84.

[59] *The Variorum Edition of the Poems of W. B. Yeats*, pp.469-70. Yeats's footnote to the poem, which originally appeared in *The Dial* (June 1924), is reprinted in *The Variorum Edition*, p.830. According to

Peter Allt and Russell K. Alspach, the editors, "The Gift of Harun Al-Rashid" is dated 1923 and was first printed in English Life and The Illustrated Review (Jan. 1924). Under the title "Desert Geometry or the Gift of Harun Al-Raschid" (dated 1923), it appears in the 1st ed. (1925) of A Vision: An Explanation of Life Founded upon the Writings of Giraldus and upon Certain Doctrines Attributed to Kusta ben Luka, pp.121-27. The poem was removed from the 2nd ed. of A Vision (1937), although it is alluded to as "The Gift of Harun Al-Rashid" (p.54). According to Charles Poncé, the Zohar connects the wisdom which Solomon receives in a dream in 1 Kings 3 with the full moon (Kabbalah: An Introduction and Illumination for the World Today, pp.269-74); this cabbalistic lore is perhaps a source for Yeats's poem.

[60] In De Docta Ignorantia, II.xii, Nicholas of Cusa writes, "unde erit machina mundi quasi habens undique centrum et nullibi circumferentiam, quoniam eius circumferentia et centrum est Deus, qui est undique et nullibi" (Opera Omnia, I, 103-04). For a brief history of the formula, see Edgar Wind, Pagan Mysteries in the Renaissance, p.227 and n.30. See also: Rudolf Wittkower, Architectural Principles in the Age of Humanism, p.25; and Jung, Psychology and Religion: West and East, in The Collected Works, XI, 155, n.6. For the soul as a sphere, see Jung, Aion: Researches into the Phenomonology of the Self, in The Collected Works, IX.2, 136.

[61] Oswald Spengler, The Decline of the West, I, 237; his emphasis. See also I, 70.

[62] Denis de Rougemont, Love in the Western World, p.110.

[63] Sébastien Charléty, Histoire du Saint-Simonisme (1825-1864), p. 208. See also: James Webb, The Flight from Reason, p.220; and "Enfantin, Barthélemy Prosper," Encyclopaedia Britannica, 11th ed.

[64] "Joyce and the Building of 'Ithaca,'" p.450.

[65] See Webb, The Flight from Reason, pp.80ff.

[66] For the Immaculate Conception, see Frederick G. Holweck, "Immaculate Conception," The Catholic Encyclopedia (1907-12), ed. Charles Herbermann et al. Pope Pius IX declared the doctrine de fide in the bull Ineffabilis Deus. According to Frank Budgen, Joyce wondered at the difficulty people had in accepting papal infallibility and said, "in the nineteenth century, in the full tide of rationalist positivism and equal democratic rights for everybody, it [the Church] proclaims the dogma of the infallibility of the head of the Church and also that of the Immaculate Conception" ("Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses' and Other Writings, pp.351-52; Budgen's bracketed remark).

[67] David Sonstroem, Rossetti and the Fair Lady, p.20. For a discussion of other artists interested in the madonna, see Friedrich Heiler, "The Madonna as Religious Symbol," in The Mystic Vision: Papers from the Eranos Yearbooks, ed. Joseph Campbell, pp.349-50.

[68] Ellmann, JJ, p.30.

[69] Ibid., pp.29-30.

[70] Fritz Senn discusses Gerty McDowell as the B.V.M. ("Nausicaa," in James Joyce's 'Ulysses': Critical Essays, ed. Clive Hart and David Hayman, pp.289-97). James Van Dyck Card sees Molly Bloom as the Virgin; he cites Tindall on the fact that Molly was born on 8 September, the feast of the Nativity of the B.V.M. ("'Contradicting': The Word for Joyce's 'Penelope,'" p.21).

[71] See Niall Montgomery, "The Pervigilium Phoenicis," p.444. Benstock associates Issy, rather than A.L.P., with the B.V.M. (Joyce-Again's Wake, p.86).

[72] "The Process of Individuation," in Jung et al., Man and His Symbols, pp.224-25. Jung writes that the doctrine of Sabellius implies a quaternary theory of God; he also quotes Joachim of Flora's accusation that Peter of Lombard characterized the divine as a quaternary (Aion, in The Collected Works, IX.2, 253, n.91).

[73] See Hart, Structure and Motif in 'Finnegans Wake', pp.143-44.

[74] For commentary on Question 4, see: Tindall, Reader's Guide to 'Finnegans Wake', p.114; Joseph Campbell and Henry Morton Robinson, A Skeleton Key to 'Finnegans Wake', p.108; Edmund L. Epstein, "The Turning Point/ Book I, chapter vi," in A Conceptual Guide to 'Finnegans Wake', ed. Michael H. Begnal and Fritz Senn, pp.59-60.

[75] Neumann, Great Mother, p.326; "Philosophia-Sophia" is reproduced as Plate 165. For a discussion of Sophia, see pp.325-33.

[76] The Comedy of Dante Alighieri the Florentine, III, 318-49.

[77] Quoted in Benjamin Jowett's Introduction to the Timaeus in his edition of The Dialogues of Plato, III, 427.

[78] The Dialogues of Plato, III, 467.

[79] Quoted in Arthur O. Lovejoy, The Great Chain of Being: A Study of the History of an Idea, p.24.

[80] Francis Macdonald Cornford, trans. and ed., Plato's Cosmology, p.171; he is quoting Grote, Plato, III, Chap.xxxvi. For Cornford's objections to the theories of Archer-Hind and Taylor concerning Mind and Necessity, see pp.162-65. For some useful remarks on Necessity, see also Edward A. Maziarz and Thomas Greenwood, Greek Mathematical Philosophy, pp.147-48.

[81] Plato's Cosmology, p.176.

[82] The Dialogues of Plato, trans. Jowett, III, 468.

[83] Ibid., III, 470.

[84] Ibid., pp.470-71.

[85] See also Campbell and Robinson, *Skeleton Key*, p.145.

[86] For the alchemical *prima materia* in *Finnegans Wake*, see my unpublished Master's thesis, "The Alchemists at *Finnegans Wake*," pp.10, 32-36, 38.

[87] For a discussion of the Prankquean episode, see Grace Eckley, "'Petween Peas Like Ourselves': The Folklore of the Prankquean."

[88] *The Dialogues of Plato*, trans. Jowett, III, 472.

[89] Ibid., p.456.

[90] Ibid., pp.468, 472. See Jowett's Introduction, pp.396, 398.

[91] Ibid., p.442.

[92] *Love in the Western World*, p.63.

[93] George Brandon Saul, *Traditional Irish Literature and Its Backgrounds: A Brief Introduction*, p.17. For other examples of the importance of women in ancient Ireland, see Robert Bierman, "'Streameress Mastress to the Sea': A Note on *Finnegans Wake*," p.79, n.1. For a list of occurrences of "Tea" in *Finnegans Wake*, see Frances M. Boldereff, *Reading 'Finnegans Wake'*, Part II, p.245. For the sexual implications of "Tea," see: Benstock, *Joyce-Again's Wake*, pp.9 and 112, n.; Tindall, *Reader's Guide to 'Finnegans Wake'*, pp.155-56 et passim; Solomon, *Eternal Geomater*, pp.77-88. For the Irish origin of "Anna," see Brendan O Hehir, "Anna Livia Plurabelle's Gaelic Ancestry."

[94] *The Poems of Alexander Pope*, p.227; Pope's emphasis. For other references to Pope in *Finnegans Wake*, see: Atherton, *Books at the Wake*, pp.70, 274; and Glasheen, *A Second Census of 'Finnegans Wake': An Index of the Characters and Their Roles*, s.v. "Belinda," "Curll," and "Pope, Alexander."

[95] Neumann, p.118. Tindall says that in passages like *FW*,201.28-.29, A.L.P. has three aspects, like the White Goddess (*Reader's Guide to 'Finnegans Wake'*, p.143; see also p.5).

[96] This question may echo the title of T. W. Rhys Davids' *Is Life Worth Living? and, The Eternal Hope. An Answer from Buddha's First Sermon to Some Questions of To-day. A Lecture . . . 1880*; cited in Shinsho Hinayama, *Bibliography on Buddhism*, #2813, p.170.

[97] See Eckley, in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.145-47 et passim.

[98] Stuart Gilbert was, I believe, the first to point out the resemblance between Molly and Gaea-Tellus (*James Joyce's 'Ulysses'*, pp. 339-43). Adams discusses Molly as Maya (*James Joyce: Common Sense and Beyond*, p.168). Eugene Patrick Benson claims that "Molly is Bruno's

feminine principle or the Pistis-Sophia of a Gnosticism that is also a part of Joachism" ("James Joyce: Orthodoxy and Heterodoxy," p.80).

[99] Letters, I, 170, 16 August 1921; Joyce's emphasis. Also quoted in Ellmann, JJ, p.388. Budgen reports that "Joyce wrote to me of Molly Bloom's nonstop monologue: 'This is the indispensable countersign to Bloom's passport to eternity'" (James Joyce and the Making of 'Ulysses', p.270).

[100] The Art of James Joyce: Method and Design in 'Ulysses' and 'Finnegans Wake', pp.45-46.

[101] Eckley tries to explain the difference between the two by saying that Molly is predominantly sexual, though still maternal, while A.L.P. is maternal, though still sexual (Begnal and Eckley, Narrator and Character in 'Finnegans Wake', p.156).

[102] Ellmann, JJ, pp.708-09; my brackets. The quotation is apparently derived from an interview Joyce had with Ole Vinding at Fredericksburg, Denmark in August 1936.

[103] For a brief remark on Finnegans Wake as a sequel to Ulysses, see Ellmann, JJ, p.558.

[104] Eternal Geomater; for her discussion of A.L.P.'s relationship to the Diagram, see p.105. Atherton suggests that a smutty schoolboys' joke underlies the Diagram and criticizes Solomon for being unaware of it (rev. of Eternal Geomater). Darcy O'Brien identifies the point P in the Diagram with A.L.P.'s vagina (The Conscience of James Joyce, p.229).

[105] Eliade, p.40.

[106] The Evolution of the Dragon, p.199, n.2. This sentence is quoted, with a degree of inaccuracy, in Robert Briffault, The Mothers: A Study of the Origins of Sentiments and Institutions, I, 474.

[107] Great Mother, pp.39, 42, et passim.

[108] Ibid., p.46.

[109] Ibid., pp.120, 137, 282-83, 289, 296, 326, 329, et passim.

[110] Ibid., p.222.

[111] Briffault, The Mothers, III, 450, 451 and nn.3, 4.

[112] Trans. Lady Charlotte Guest, pp.37, 44. This example is also mentioned in Briffault, The Mothers, III, 450.

[113] The Mothers, III, 451.

[114] Essays and Introductions, p.185.

[115] Charles Hercules Read, "Archaeology," Encyclopaedia Britannica,

11th ed., II, 349, 350.

[116] Briffault, The Mothers, III, 451-52; his authority is J. O'Donovan, The Banquet of Dun Na N-Gedh and the Battle of Mag Rath (Dublin: Irish Archaeological Society, 1842), pp.51ff.

[117] Lady Augusta Gregory, Gods and Fighting Men: The Story of the Tuatha de Danaan and of the Fianna of Ireland, p.188.

[118] Gilhooly, pp.4-12.

[119] Ibid., p.7.

[120] Quoted in John Read, Prelude to Chemistry: An Outline of Alchemy, Its Literature and Relationships, p.54.

[121] For the homunculus in alchemy, see Jung, Psychology and Alchemy, in The Collected Works, XII, 199 et passim.

[122] Quoted in Joseph Pohle, "Eucharist," in The Catholic Encyclopedia, ed. Charles G. Herbermann et al., V, 573. See also: St. Thomas Aquinas, Summa Theologiae, LVIII, 72-73 (III.75.4.resp.); Jung, "The Problem of Transubstantiation," Psychological Types, in The Collected Works, VI, 23-26; and Henry Bett, Johannes Scotus Erigena: A Study in Mediaeval Philosophy, pp.8-10.

[123] Pohle, "Eucharist," p.579. See Aquinas, Summa Theologiae, LVIII, 100-03 (III.76.3).

[124] G. Elliot Smith, The Evolution of the Dragon, p.190.

[125] J. A. MacCulloch, "Charms and Amulets (Celtic)," in Encyclopedia of Religion and Ethics, III, 413.

[126] An Etymological Dictionary of the English Language (new ed., rev. and enl., 1910), s.v. "glamour," "gramarye," and "grammar."

[127] The Mothers, III, 451. See The Mabinogion, p.295.

[128] See Solomon, Eternal Geomater, p.101.

[129] Plutarch's De Iside et Osiride, p.203 (liii.372E). Ernst Cassirer writes that "the polynomy of the personal deities is an essential trait in their very being. 'For religious feeling, the power of a god is expressed in the abundance of his epithets; polynomy is a prerequisite for a god of the higher, personal order.' In the Egyptian writings, Isis appears as the thousand-named, the ten-thousand-named, the myrionyma; in the Koran, Allah's might finds expression in his 'hundred names'" (Language and Myth, pp.72-73; he is quoting H. Usener, Götternamen: Versuch einer Lehre von der religiösen Begriffsbildung [Bonn, 1896], p.334). A summary of Plutarch's account of Isis and Osiris can be found in Budge, Osiris, pp.2-9; for summaries of other classical writers on the Osiris legend, with commentary, see pp.9-19. See also R. E. Witt, Isis in the Graeco-Roman World. For Joyce and Egypt, see n.286 in Chapter Two of

the present study. See also Glasheen, *Second Census*, s.v. "Isis and Osiris."

[130] *Plutarch's De Iside et Osiride*, pp.119-21 (ii.373E-F).

[131] Ibid., p.121 (iii.352B). See the Introduction by the editor and translator, J. Gwyn Griffiths, pp.70-71.

[132] Ibid., p.203 (lii.372D-E). See Griffith's Introduction, p.58.

[133] Florence Baker Lennon, *Victoria through the Looking-Glass: The Life of Lewis Carroll*, pp.x, 108. Atherton gives an absorbing account of Joyce's relation to Carroll (*Books at the Wake*, pp.124-36), but he has overlooked the identity of Alice Pleasance Liddell and A.L.P. by their initials.

[134] *Plutarch's De Iside et Osiride*, pp.205 and 119-21 (liv.373A and ii.373E-F).

[135] Atherton has also connected this passage with the dismemberment of Osiris (*Books at the Wake*, p.198). I have done considerable research on the Egyptological and astrological implications of this passage, but to expound upon them here would be a considerable digression.

[136] *A Vision* (1937), p.81. For discussion of catasterism, see Franz Cumont, *Astrology and Religion among the Greeks and Romans*, pp. 65, 97, 99.

[137] R. G. Torrens, *The Golden Dawn: The Inner Teachings*, pp.48-49. On the Egyptian elements in the Golden Dawn, see: Torrens, pp.47-54; Kathleen Raine, *Yeats, the Tarot and the Golden Dawn*, p.29; and Israel Regardie, *The Golden Dawn: An Account of the Teachings, Rites and Ceremonies of the Order of the Golden Dawn*, especially III, Chaps.iv and v.

[138] *Plutarch's De Iside et Osiride*, p.145 (xviii.357F).

[139] Ibid., p.145 (xviii.358A).

[140] *Osiris*, I, 92-93.

[141] *Egyptian Magic*, p.229. See *Books at the Wake*, p.197.

[142] *Osiris*, I, 70, 71, 75.

[143] Ibid., p.74.

[144] *Egyptian Magic*, p.27. According to the *Chapters of Coming Forth by Day*, says Budge, the sources of the words of power are Thoth and Isis (ibid., p.128).

[145] Atherton also attributes Joyce's "*words of silent power*" to Budge, but he does not mention *hekau* (*Books at the Wake*, p.194). Michael Stuart compares *Finnegans Wake* to *The Book of the Dead* in that they

share the magical attitude towards the Word ("Mr. Joyce's Word-Creatures," p.461). Kristian Smidt analyzes Joyce's attitude towards language as magical (*James Joyce and the Cultic Use of Fiction*, pp.67-77).

[146] It is usual to note that he read Budge's version of *The Book of the Dead*; see Atherton, *Books at the Wake*, pp.191-93. Atherton also shows that Joyce used J. H. Speke's *Journal of the Discovery of the Sources of the Nile* (ibid., pp.171, 281), but this book has nothing to do with mythology or religion. Jackson I. Cope discusses James Hope Moulton's *From Egyptian Rubbish-heaps* as another source ("From Egyptian Rubbish-heaps to *Finnegans Wake*"). See n.286 in Chapter Two.

[147] *Plutarch's De Iside et Osiride*, pp.207-09 (lvi.373E-374A). In another place, Plutarch remarks that the Pythagoreans "used to call the equilateral triangle Athena born from the forehead (of Zeus)" (p.239 [lxxv.381E]; original parentheses).

[148] *The Dialogues of Plato*, trans. Jowett, III, 442.

[149] *History*, trans. Cary, p.135 (ii.109). For other classical accounts, see Sir Thomas Heath, *A History of Greek Mathematics*, I, 121.

[150] *Metaphysics*, A.1.981^{b}23-24, trans. W. D. Ross, in *The Basic Works of Aristotle*, ed. Richard McKeon, pp.690-91.

[151] *The Dialogues of Plato*, I, 484.

[152] *A Concise Etymological Dictionary of the English Language* (2nd and rev. ed., 1885), s.v. "mother." In the corresponding entry in his *An Etymological Dictionary of the English Language* (new ed., rev. and enl., 1910), Skeat omits the meaning "to measure" for *MA* and says that the root is of uncertain meaning.

[153] See Glasheen, *Second Census*, s.v. "Mut." Adams also calls attention to the association between geometry and mud (*James Joyce: Common Sense and Beyond*, pp.188-89).

[154] Joyce's typology conflicts with that of Plutarch, who writes, "Osiris is the Nile uniting with Isis as the earth, while Typhon is the sea into which the Nile falls and so disappears, save for that part which the earth takes up and receives, becoming fertile through it" (*Plutarch's De Iside et Osiride*, p.167 [xxxii.363D]; see the editor's comments, pp.419-21).

[155] Atherton shows that Speke's *Journal of the Discovery of the Sources of the Nile* contributes to the Victoria and Albert Nyanza motif (e.g. *FW*,598.06); he proposes that Victoria Nyanza is Joyce's metaphor for the Great Mother (*Books at the Wake*, pp.171, 281). See also Glasheen, *Second Census*, s.v. "Nyanza."

[156] For the Nile in *Finnegans Wake*, see Glasheen, *Second Census*, s.v. "Cleopatra."

[157] Ibid., s.v. "Ptolemy."

[158] Finnegans Wake Holograph Workbook, MS.VI.B.1 (ca.1922-24), p. [33], Wickser Collection; my bracketed question marks, indicating illegibility. The first five and the last five words are crossed through, an indication that Joyce used them in Finnegans Wake. For a bibliographical description, see Spielberg, comp., James Joyce's Manuscripts and Letters at the University of Buffalo, pp.97-98.

[159] Atherton, Books at the Wake, p.125.

[160] Sullivan, ed., p.31; he is quoting Dr. F. Keller.

[161] Peter Meyer, "Notes on the Art and Ornament of the Book of Kells," in Evangeliorum Quattuor Codex Cenannensis, III, 48-50; Françoise Henry, ed., The Book of Kells: Reproductions from the Manuscript in Trinity College Dublin, pp.190-214. For a bibliography of studies on the link between Insular MSS and Egyptian art, see Henry, p.213.

[162] Sullivan, ed., Plates XIII and XVII (fols.130^r and 201^r). In Henry, ed., these two appear as Plates 51 and 65. For a full list of the Osiris pose in The Book of Kells, see Henry, ed., p.190.

[163] Henry, ed., p.191.

[164] J. A. Herbert, Illuminated Manuscripts, pp.78-79; Meyer, p.48.

[165] Preface (dated 30 May 1935) to A Full Moon in March (London, 1935); reprinted in Variorum Edition of the Poems of W. B. Yeats, p. 857. See also "Commentary on Supernatural Songs," which first appeared in The King of the Great Clock Tower (Dublin: Cuala, 1934) (reprinted in Variorum Edition, p.837).

[166] Ancient Faiths Embodied in Ancient Names, I, 107.

[167] Structure and Motif, p.204.

[168] "Great-Bladdered Medb: Mythology and Invention in the Táin Bó Cuailnge," pp.25-28.

[169] For urine and tea in Finnegans Wake, see Hart, Structure and Motif, pp.206-08 et passim.

[170] Eliade, The Forge and the Crucible, p.41.

[171] The Dialogues of Plato, trans. Jowett, III, 497-98.

[172] Heinrich Zimmer, Philosophies of India, p.154.

[173] For further comments on this point, see: Campbell and Robinson, Skeleton Key, p.11; Tindall, Reader's Guide to 'Finnegans Wake', pp.4, 99, 115, et passim; Mabel P. Worthington, "The Moon and Sidhe: Songs of Isabel," in New Light on Joyce from the Dublin Symposium, ed. Senn, p. 167; Begnal, in Begnal and Eckley, Narrator and Character in 'Finnegans Wake', p.93.

[174] Neumann, Great Mother, pp.307-08.

[175] For circular imagery in Joyce, see: Maria Elisabeth Kronegger, James Joyce and Associated Image Makers, pp.33-56; and Leo Knuth, "The Ring and the Cross in Joyce's Ulysses," in 'Ulysses' cinquante ans après: témoignages franco-anglais sur le chef-d'oeuvre de James Joyce, ed. Louis Bonnerot, J. Aubert, and Cl. Jacquet.

[176] Neumann, Great Mother, p.238 and Plate 99.

[177] I have shown elsewhere that "he wags an antomine art of being rude like the boor" (167.03) refers to an incident in the life of the alchemist Basil Valentine ("The Alchemists at Finnegans Wake," p.46).

[178] Neumann, Great Mother, p.197.

[179] For the woman as reconciler of opposites, see: Benstock, Joyce-Again's Wake, pp.18-19; and Northrop Frye, "Quest and Cycle in Finnegans Wake."

[180] For Jacob and Esau, see Glasheen, Second Census, s.v. "Jacob and Esau."

[181] Letters, I, 213, to Harriet Shaw Weaver, 29 November 1926. See n.179 in Chapter Two of the present study.

[182] See Glasheen, Second Census, s.v. "Moore, Mot," and "Moore, Thomas."

[183] Atherton devotes an entire chapter to Joyce's use of Swift (Books at the Wake, pp.114-23). Benstock discusses clothing in Swift and Carlyle (Joyce-Again's Wake, p.185). See also Harry Levin, James Joyce: A Critical Introduction, pp.166-67.

[184] Books at the Wake, pp.118-19. Elaine M. Kauver argues that in "Grace," clothing is the body and soul, as well as an image of the appearances of grace ("Swift's Clothing Philosophy in A Tale of a Tub and Joyce's 'Grace'").

[185] "Power: Nude or Naked," in A Collection, p.155. See Swift, Gulliver's Travels, III.ii, in The Prose Works of Jonathan Swift, XI, 155.

[186] The Drapier's Letters, ed. H. Davis (Oxford, 1935), p.79; quoted in Atherton, Books at the Wake, p.123.

[187] Books at the Wake, p.240.

[188] Budgen, "Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', pp.354-55.

[189] See Campbell and Robinson, Skeleton Key, p.199, n.6.

[190] Hans Jonas, The Gnostic Religion: The Message of the Alien God

and the Beginnings of Christianity, p.56.

[191] Great Mother, p.46. Quoted in Watson, "Power: Nude or Naked," p.153.

[192] Benstock lists sixteen occurrences of the seven articles of clothing, with three further examples which are doubtful (Joyce-Again's Wake, p.188, n.).

[193] Skeleton Key, p.43, n.11.

[194] Jonas, "Gnosticism," in The Encyclopedia of Philosophy, ed. Paul Edwards, III, 338, 340.

[195] Describing the A.L.P. episode (I.8) to Harriet Shaw Weaver, Joyce writes, "the splitting up towards the end (seven dams) is the city abuilding" (Letters, I, 213, 7 March 1924). See "seven dams" (215.15).

[196] Graves, White Goddess, p.22.

[197] I am in essential agreement with the analyses of this passage presented by Hart, Structure and Motif, pp.130, 132-34; and Tindall, Reader's Guide to 'Finnegans Wake', pp.319-21.

[198] "Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', p.355. For other evidence of Joyce's interest in underclothing, see the limerick quoted in Ellmann, JJ, p.167; the episode memorialized in the limerick is recounted in U,217 and FW,227.23-.25. The incident involving Oliver St. John Gogarty and underwear in the Dawson chambers of A.E.'s Hermetic Society, which is recalled in U,185-86, is recounted in JJ, pp.179, 180 and n.; his sources are: Stanislaus Joyce, My Brother's Keeper, p.255; and Gogarty, Mourning Became Mrs. Spendlove, p.54. In FW,327.28-.30, Stephen Dedalus' innocent encounters with Eileen (Portrait,35-36) and the bird-girl (Portrait,171-73) are conflated with Bloom's onanistic admiration for Gerty MacDowell and her bloomers (U,365-69). Shem's attempts to guess the girls' colours (233.21-.27) is discussed by Joyce as the game of Angels and Devils or Colours, in Letters, I, 295, to Harriet Shaw Weaver, 22 November 1930; see also Begnal, in Begnal and Eckley, Narrator and Character in 'Finnegans Wake', pp.105-06. Shem's guesswork may also owe something to the myth of the princess who murders the suitors unable to answer her riddle and awards herself (she being the riddle) to the man who can (see Neumann, Great Mother, p.35). Further, the guessing has overtones of the tale of Rumplestiltskin, which, as C. K. Ogden and I. A. Richards note, attracted critical interest as an example of verbal magic and secret names (The Meaning of Meaning: A Study of the Influence of Language upon Thought and of the Science of Symbolism, p.26 and n.2, p.31). On Rumplestiltskin in Finnegans Wake, see Hart, Structure and Motif, p.164. It is of some interest to compare Joyce's Diagram to the triangle which Ogden and Richards employ to illustrate the relationship of symbol, thought, and referent (ibid., p.11); see also the further elaboration of this triangle by Bronislaw Malinowski in Supplement 1, "The Problem of Meaning in Primitive Languages," in The Meaning of

Meaning, p.324. Ogden translated *Anna Livia Plurabelle* (1928) into Basic English, was responsible for the recording which Joyce made of it for the Orthological Institute, and wrote a Preface to *Tales Told of Shem and Shaun: Three Fragments from Work in Progress* (1929) (Ellmann, *JJ*, p.627). There is a strong possibility, then, that Joyce was familiar with *The Meaning of Meaning*. For examples of Ogden's "infix" in *Finnegans Wake*, see Thomas A. Zaniello, "Joyce Infixed by Ogden."

[199] Campbell and Robinson point out the correspondences and arrange the *cakras* in their ascending order, but they have no further comment (*Skeleton Key*, p.190 and n.63).

[200] See Benjamin Walker, *The Hindu World: An Encyclopedic Survey of Hinduism*, s.v. "tantrism"; and Eliade, Note VI, 1, "On the Literature of Tantrism," in *Yoga: Immortality and Freedom*, pp.399-403.

[201] Campbell and Robinson, passim. In "Sanskrit Translations," Misra gives a list of the Sanskrit in *FW*,593-601.

[202] *Structure and Motif*, pp.44-77, 96-104.

[203] *Books at the Wake*, p.228.

[204] Eliade, *Yoga*, pp.200-01; for excellent annotated bibliographies, see pp.399-414. He translates *tantra* as "what extends knowledge" (p.200). See also: Zimmer, *Philosophies of India*, pp.560-602; the translations, editions, and commentaries of Sir John Woodroffe [Arthur Avalon], including *The Garland of Letters: Studies in the Mantra-Śāstra*, *Hymns to the Goddess*, *Śakti and Śākta: Essays and Addresses*, *The Serpent Power: Being the Ṣaṭ-Cakra-Nirūpaṇa and Padukā-Pañcaka, Two Works on Laya-Yoga*, *Tantra of the Great Liberation (Mahānirvāna Tantra)*, and, with Swamī Pratyagatmananda Saraswati, *Sadhana for Self-Realization (Mantras, Yantras and Tantras)*; Walker, *Hindu World*, passim; Hall, *Man, the Grand Symbol of the Mysteries: Essays in Occult Anatomy*, Chap.xiv; Shashi Bhushan Dasgupta, *Obscure Religious Cults*; and O. P. Jaggi, *Yogic and Tantric Medicine*, Vol.V of *History of Science and Technology in India*. According to Thomas E. Connolly, Joyce's copy of Zimmer's *Maya der indische Mythos* (Berlin: Deutsche Verlags-Anstalt, 1936) is signed by the author, 8 October 1938 (*The Personal Library of James Joyce: A Descriptive Bibliography*, Item 317, pp.42-47); the date precludes substantial influence on *Finnegans Wake*. Connolly transcribes and translates passages which were marked by pencil, but none of these relate to tantrism as such. According to Atherton, Zimmer is named at *FW*,69.32 and 349.04 (*Books at the Wake*, p.224). See also Ellmann, *JJ*, p.735.

[205] For the Buddhist system of *cakras*, see: Eliade, *Yoga*, pp.243-44; S. B. Dasgupta, *Obscure Religious Cults* and *An Introduction to Tantric Buddhism*; Lama Anagarika Govinda, *Foundations of Tibetan Mysticism: According to the Esoteric Teachings of the Great Mantra Oṁ Maṇi Padme Hūṁ*; and John Blofeld, *The Tantric Mysticism of Tibet: A Practical Guide*. For translations of some texts of the Buddhist tantra, see Edward Conze et al, eds., *Buddhist Texts through the Ages*, Part III.

[206] Hart, *Structure and Motif*, pp.56-57. See Blavatsky, *Secret*

Doctrine, II, 68-70.

[207] Woodroffe's Introduction to his translation of Tantra of the Great Liberation, p.xlviii.

[208] Ibid., p.xlix. For the idea that each age has its Scripture, see also: Eliade, Yoga, pp.203-06; and Jaggi, Yogic and Tantric Medicine, p.108.

[209] Zimmer, Philosophies of India, p.379.

[210] Ibid., pp.576, 580.

[211] Ibid., pp.576-78.

[212] Eliade, Yoga, p.248.

[213] Ibid., p.262. See also Walker, Hindu World, s.v. "sex mysticism."

[214] For the Śiva-Śakti doctrine, see: Woodroffe, trans., Serpent Power, pp.26-28, and Tantra of the Great Liberation, pp.xix-xxxi; S. B. Dasgupta, Introduction to Tantric Buddhism, pp.3-4, and Obscure Religious Cults, pp.99, 128, 195, 230, 333ff.; Eliade, Yoga, pp.203, 206, 265, 269; O. K. Nambiar, "Spirit-Psyche-Symbol-Song," in Anagogic Qualities of Literature, ed. Joseph P. Strelka, pp.53-57; and Jaggi, Yogic and Tantric Medicine, p.115.

[215] Eliade, Yoga, p.219; Aniela Jaffé, "Symbolism in the Visual Arts," in Jung et al., Man and His Symbols, p.240.

[216] Eliade, Yoga, pp.202-03, 259.

[217] In the notes for this passage, Joyce refers to "black magic" in the same phrase with "Left hand, cult of Shakti"; according to the note, "Pūnarjanam" means "reincarnation" (Joyce's 'Ulysses' Notesheets in the British Museum, ed. Phillip F. Herring, p.279).

[218] Eliade, Yoga, pp.134 et passim; Walker, Hindu World, s.v. "tantrism."

[219] Campbell thinks that the first word of Finnegans Wake, "riverrun," implies the presence of Śakti-Maya, the Mother of All (Creative Mythology, in The Masks of God, IV, 290).

[220] Woodroffe, Introduction to Tantra of the Great Liberation, p. xxvii.

[221] The Gospel of Śrī Rāmakrishna, trans. Swāmī Nikhilānanda (New York, 1942), pp.135-39; quoted in Zimmer, Philosophies of India, p.566. See Christopher Isherwood's biography of the saint, Ramakrishna and His Disciples.

[222] Zimmer, Philosophies of India, p.569.

[223] Introduction to *Tantra of the Great Liberation*, p.cxl.

[224] Ibid., pp.xxvi, lviii.

[225] Zimmer, *Philosophies of India*, pp.585-86; Eliade, *Yoga*, pp. 245-49. Titus Burckhardt compares the awakening of the *kuṇḍalinī* serpent to the alchemical process (*Alchemy: Science of the Cosmos, Science of the Soul*, pp.131-35).

[226] *Psychoanalysis and the Unconscious* (1921), p.9. In a note to *FW*,303.L1, Tindall writes that "the four centers of serpentine fire seem to refer ironically to D. H. Lawrence at his most occult, e.g. *Psychoanalysis and the Unconscious* and *Fantasia of the Unconscious*, those queer mixtures of Theosophy and Yoga" (*Reader's Guide to 'Finnegans Wake'*, p.185). This is a misleading and confused statement. There are "four centers" in Lawrence's account, but there are, of course, seven in Joyce's; perhaps "four centers" is a misprint for Joyce's "*Force Centres*" (303.L1). If Joyce were referring to Lawrence, one would expect that he would have learned something from him, but Lawrence does not use any of the technical terminology that Joyce does. Joyce connects the Serpent Power to poetry; there is not the slightest hint of such an association in Lawrence's accounts.

[227] *Philosophies of India*, pp.321, 374. See also Eliade, *Yoga*, pp. 68, 69, 71.

[228] *My Brother's Keeper*, p.140.

[229] Leadbeater, pp.25-31. I quote from the 2nd ed. (1972).

[230] Introduction to *Serpent Power*, pp.7-12, 1. He is actually discussing Leadbeater's *The Inner Life*, which I have not examined, but there should be little difference between this text and *The Chakras*.

[231] Introduction to *Serpent Power*, p.18; my brackets.

[232] *The Chakras*, p.96; my brackets. See also p.7, n. In the "Cyclops" episode of *Ulysses* (301), theosophical and tantric terminology that is partly derived from Leadbeater is used to describe the invocation of Paddy Dignam's spirit: "in the darkness spirit hands were felt to flutter and when prayer by tantras had been directed to the proper quarter a faint but increasing luminosity of ruby light became gradually visible, the apparition of the etheric double being particularly lifelike owing to the discharge of jivic rays from the crown of the head and face. Communication was effected through the pituitary body and also by means of the orangefiery and scarlet rays emanating from the sacral region and solar plexus." Joyce's source for the technical terms here is probably Leadbeater's *The Inner Life* (1910), which I have been unable to examine; instead, I rely on *The Chakras*, which, although it was published five years after *Ulysses*, is largely a repetition of the material in the earlier book, if I understand correctly Leadbeater's own remark (*The Chakras*, p.95). The most convincing evidence that Joyce used Leadbeater for *U*,301 is the colour "orangefiery," which he assigns to "the sacral region"; according to Leadbeater, the root or sacral *cakra* "when acting

with any vigour . . . is fiery orange-red in colour" (p.12). I cannot find Joyce's "scarlet" for the "solar plexus" in Leadbeater's account; however, he does say that the predominant colour of the navel cakra at the solar plexus is "a curious blending of several shades of red, though there is also a great deal of green in it" (p.13). Joyce characterizes the "pituitary body" as a vehicle of communication with the spirits; Leadbeater associates this body with the sixth cakra (p.10) and describes it as "a perfect link with the astral vehicle" (p.86). The term "etheric double," upon which the cakras appear (p.4), is used several times by Leadbeater. I can find no reference in Leadbeater to the "ruby light," but he does speak of a rose ray, which indicates the vitality of the etheric double (p.56). Neither can I find the words "tantras" or "jivic rays" in Leadbeater, although he does speak of the Jīvātmā ("living self") (p.112). Some of this terminology is repeated by Stephen Dedalus in "The Oxen of the Sun" episode, in response to Mulligan's remark, "Any object, intensely regarded, may be a gate of access to the incorruptible eon of the gods" (U,416). Mulligan is explaining the "vision" which Bloom is just then experiencing by virtue of an intense regard at the scarlet triangle on a bottle of Bass's Ale. In view of the tantric allusions, it seems altogether probable to me that Joyce is thinking of the scarlet triangle as a yantra, or geometrical design used in tantrism for purposes of meditation (see main text, below).

[233] The Chakras, p.7. For the Indian system, see: Woodroffe, trans., Commentary on Serpent Power, pp.118-207, and Introduction to Tantra of the Great Liberation, pp.lvii-lxv; Zimmer, Philosophies of India, pp. 584-85; Eliade, Yoga, pp.241-45; Walker, Hindu World, s.v. "chakra"; and Hall, Man, the Grand Symbol of the Mysteries, Chap.xiv.

[234] The Chakras, pp.14-16. For the Indian concept, see, among others: Walker, Hindu World, s.v. "chakras"; and Eliade, Yoga, p.243.

[235] Hall, p.121. He speaks of the "Brahma-randhra," which, as Eliade points out, is a synonym for the sahasrāra (Yoga, p.243).

[236] See Joyce's 'Ulysses' Notesheets in the British Museum, ed. Herring, p.164.

[237] Bernard de Fontenelle, "Préface sur l'utilité des mathématiques et de la physique" (1731), in OEuvres (Paris, 1825), I, 54; cited in Isabel F. Knight, The Geometric Spirit: The Abbé de Condillac and the French Enlightenment, p.18. The phrase "geometric spirit," says Knight, was Pascal's term for the method and approach of mathematics, in distinction to the "subtle spirit" of philosophy; the futile aim of this distinction was to preserve philosophy from the influence of Descartes, who declared mathematics to be an all-embracing method. Knight also notes Spinoza's proposal to treat ethics by geometry, and Hobbes' insistence on mathematics.

[238] The Chakras, p.4.

[239] Walker, Hindu World, s.v. "chakra." See also Leadbeater, pp. 11-16, 21, 54-61, 71-73, 78-80.

[240] Atherton notes these allusions, although he incorrectly refers to *FW*,318.21 (*Books at the Wake*, p.276).

[241] Eliade, *Yoga*, p.261, n.204, and p.263.

[242] *The Chakras*, p.105.

[243] Woodroffe, trans., Introduction to *Tantra of the Great Liberation*, p.xciv.

[244] *Philosophies of India*, p.583.

[245] *Aion*, in *The Collected Works*, IX.2, 204. See also Eliade, *Yoga*, pp.219-27.

[246] *Myths and Symbols in Indian Art and Civilization*, p.141.

[247] *Structure and Motif*, pp.76-77.

[248] Cassirer, *The Philosophy of Symbolic Forms*, II, 92; Neumann, *The Origins and History of Consciousness*, p.25.

[249] Eliade, *Yoga*, p.210.

[250] For Joyce's plan, see: Gilbert, *James Joyce's 'Ulysses'*, pp. 37-39 et passim; and Hugh Kenner, *Dublin's Joyce*, pp.226-27 et passim.

[251] For other allusions to Fletcher, see Atherton, *Books at the Wake*, p.249.

[252] Eliade, *Yoga*, p.224.

[253] *The Chakras*, pp.21-22.

[254] Eliade, *Yoga*, pp.212-16.

[255] Ibid., p.215. See also Woodroffe, trans., *The Garland of Letters*, pp.305ff., and Introduction to *Tantra of the Great Liberation*, pp. lxxxiii-xc.

[256] Zimmer, *Philosophies of India*, p.377.

[257] Ibid., p.585; Eliade, *Yoga*, p.245.

[258] *Structure and Motif*, pp.96-104. Strother B. Purdy writes that "Sanskrit doctrine also includes a view of the word as an apparition of divinity, Brahma as *çabda*, that offers intriguing parallels to HCE as universal name, as well as the 'yes' of *Ulysses* as a kind of AUM. Perhaps this kind of thing has already gone far enough in the West, however" ("Mind Your Genderous: Toward a *Wake* Grammar," in *New Light on Joyce from the Dublin Symposium*, ed. Senn, p.57).

[259] For a discussion of leitmotiv in *Finnegans Wake*, see Hart, *Structure and Motif*, pp.161-81. Jack P. Dalton points out, in "'A More

Modern Instance,'" that *FW*,180.17-.30 is repeated almost verbatim in Henry Miller, *The Tropic of Cancer* (Paris: The Obelisk Press, [1934]), p.99. What he does not mention is that immediately thereafter, Miller's hero receives a *mantra*.

[260] Eliade, *Yoga*, pp.210-11.

[261] Neither Giorgio Melchiori nor Lodwick Hartley seem to be aware of tantrism. Melchiori thinks that *FW*,303.05-.08 and 303.L1 demonstrate the "pre-eminence accorded to Sterne," because the navel links, as it were, the two lists of the "*Force Centres*" and the authors; Sterne is associated with the navel because of the length of time which Tristram Shandy spends in the womb ("Joyce and the Eighteenth-Century Novelists," pp.234-35). If Melchiori would investigate tantrism, he would realize that the navel *cakra* is not at all the position of pre-eminence; furthermore, the *cakras* are not to be identified with the bodily organs as such. The same objections can be brought against Hartley, who, arguing that the influence of Sterne upon Joyce is limited, asks, "does the fact that the navel occupies a focal place (shall we say?) in Yoga necessarily mean that Sterne has been given the preferred ranking in the catalogue? If so, why in this instance should he have ranked above Swift, who is obviously everywhere else one of Joyce's favourites? Or why above Yeats? One does not, of course, ask for logic in a dream world; and with Joyce, the layers of symbolism may be multiple or even infinite" ("'Swiftly-Sterneward': The Question of Sterne's Influence on Joyce," pp.42-43). Hartley also suggests that Sterne might be the navel because Tristram Shandy is unborn; in the same way - and here I must agree - the heart would stand for Steele's sentimental comedy, the throat for Burke's oratory, and the spleen for Swift's satire. For further remarks on Joyce and Sterne, see: Lawrance Thompson's superficial reading in *A Comic Principle in Sterne-Meredith-Joyce*; and Ann Ridgeway, "Two Authors in Search of a Reader."

[262] See Atherton, *Books at the Wake*, p.282.

[263] *The Chakras*, pp.73, 79.

[264] Melchiori compares the gyre to the serpent (*The Whole Mystery of Art: Pattern into Poetry in the Work of W. B. Yeats*, p.263); he cites Virginia Moore, *The Unicorn: William Butler Yeats' Search for Reality*, p.274. For the effect of tantrism on the Golden Dawn, see Torrens, *The Golden Dawn*, pp.59-62; Torrens does include the spleen as a *cakra*, but it seems to me that rather than representing the original ideas of the Golden Dawn, he is simply repeating Leadbeater's *The Chakras*, which he cites.

[265] Shaw, p.47. According to Warren Sylvester Smith, the passage should read "the square root of Myna's one" ("A Note on the Mathematical Pun . . . ").

[266] Ogham in Joyce requires a full study. It is referred to in *U*, 689; see *Joyce's 'Ulysses' Notesheets in the British Museum*, ed. Herring, p.458, lines 2, 5. In a letter, Joyce writes, "the Irish alphabet (ailm, beith, coll, dair etc) is all made up of the names of trees"

(Letters, I, 224, to Harriet Shaw Weaver, 1 January 1925). ¶Relying on Graves and Bayley as authorities, Eckley considers ogham in her extended analysis of tree imagery (in Begnal and Eckley, Narrator and Character in 'Finnegans Wake', pp.149-50, 163-81). See also Norman O. Brown, Closing Time, p.104.

[267] Variorum Edition of the Poems, p.480, line 18.

[268] "Commentary on A Parnellite at Parnell's Funeral," in ibid., pp.832-35; the essay originally appeared in The King of the Great Clock Tower (Dublin: Cuala, 1934).

[269] "The Twenty-Eight Incarnations," A Vision (1937), Book I, Part iii, pp.105-84.

[270] Woodroffe, trans., Commentary on Serpent Power, pp.19, 188.

[271] Woodroffe, trans., Introduction to Tantra of the Great Liberation, pp.lxxxiv-lxxxv. See also Nambiar, "Spirit-Psyche-Symbol-Song," pp.54-56.

[272] Ṣaṭ-Cakra-Nirūpaṇa, verses 10-11, in Woodroffe, trans., Serpent Power, pp.390-91.

[273] Woodroffe, trans., Serpent Power, p.391, n.2.

[274] Yoga, p.214.

[275] Ibid., pp.249-51.

[276] Zimmer, Philosophies of India, pp.34-42. See also Woodroffe's Introduction to Tantra of the Great Liberation, pp.cxlii-cxlvi.

[277] Oriental Mythology, in The Masks of God, II, 17, 21; he cites Ashvaghosha, Buddhacarita, 13-14, in Sacred Books of the East (Oxford: Clarendon, 1894), XLIX, 137-58. Campbell and Robinson translate the four words and write "Kavya ('the poet') will give the key; there is a suggestion here of Kathe (the poet's muse!) who supplied the key to the museum, p.8" (Skeleton Key, p.89, n.17). I agree with the last part of this statement, but kāvya, as I show in the main text, is not Sanskrit for "poet."

[278] Walker, Hindu World, s.v. "kathā."

[279] For further remarks on the Kāvya, see: F. Max Müller, A History of Ancient Sanskrit Literature: So Far as It Illustrates the Primitive Religion of the Brahmans, p.38, n.1; Albrecht Weber, The History of Indian Literature, pp.183-210; Arthur A. Macdonell, A History of Sanskrit Literature, pp.277-332, 446-47; H. Julius Eggeling, "Sanskrit," Encyclopaedia Britannica, 11th ed.; and Walker, Hindu World, s.v. "kāvya." Purdy is writing principally of Joyce and transformational grammar, but he does remark on the possible connection between Finnegans Wake and the Indian grammarians' "elaborate classification of word and phrase by levels of suggestion, sound, and meaning" ("Mind Your Genderous: Toward

a *Wake* Grammar," p.57).

[280] Macdonell, *History of Sanskrit Literature*, p.329. The *Kāvyas* in question are *Kirātārjunīya* (xv.14) and *Çiçupāla-vadha* (xix.34).

[281] *Great Mother*, pp.291-92.

[282] Ibid., p.297.

[283] Ibid., pp.292, 295-96; he is quoting Martin Ninck, *Woden und germanischer Schichsalsglaube* (Jena, 1935), p.305.

[284] *Great Mother*, pp.296-97.

[285] See Linda Fierz-David's Introduction to her edition of Francesco Colonna, *The Dream of Poliphilo* (1499), pp.21-22; she writes that Polia, the heroine of Colonna's tale, is akin to Beatrice and transforms the hero.

[286] See Ross Grieg Woodman, *The Apocalyptic Vision in the Poetry of Shelley*, pp.15-16. See also Sir Herbert Read, "The Poet and His Muse," in *Eranos-Jahrbuch 1962: Der Mensch, Führer und Geführter im Werk*, ed. Adolf Portmann.

[287] Graves, pp.9-10.

[288] See also Ellmann's Introduction to *Giacomo Joyce*, p.xxii.

[289] Ellmann, *JJ*, p.162.

[290] *Joyce in Love*, p.1; for Nora and "The Dead," see pp.10-11; for Nora and *Exiles*, see p.12. For Nora in Joyce's works, see also Hélène Cixous, *The Exile of James Joyce*, pp.504-26. Basing himself on the *Letters*, Mark Shechner, too, has some useful observations on Nora (*Joyce in Nighttown: A Psychoanalytic Inquiry into 'Ulysses'*, pp.53-99).

[291] *Letters*, II, 248, 5 September 1909; Joyce's emphasis.

[292] Ellmann adduces evidence in support of this idea from Joyce's lecture on Blake (*CW*,214-22) and from *Exiles* (*Joyce in Love*, p.7).

[293] *JJ*, pp.306-07. See also Cixous, *Exile of James Joyce*, p.422.

[294] *James Joyce: Common Sense and Beyond*, p.105. He also writes that "central to all the religions of Stephen Dedalus is the figure of a woman" (p.102).

[295] *Letters*, II, 243, 2 September 1909. See also: O'Brien, *The Conscience of James Joyce*, and "Some Psychological Determinants of Joyce's View of Love and Sex," in *New Light on Joyce from the Dublin Symposium*, ed. Senn, pp.16, 17, 24; Shechner, *Joyce in Nighttown*, pp.153-91; Adams, "The Bent Knife Blade: Joyce in the 1960's," pp.507-08; and Robert Boyle, S.J., "'Astroglodynamonologos,'" in *New Light on Joyce*, pp.134-36.

[296] Budgen, *James Joyce and the Making of 'Ulysses'*, p.13.

[297] Quoted in Stanislaus Joyce, *The Complete Dublin Diary of Stanislaus Joyce*, p.11, n.8, MS note for 26 September 1903. The epigram is attributed to Dr. Perse.

[298] *Letters*, II, 96, to Stanislaus Joyce, 12 July 1905. Also quoted in Ellmann, *JJ*, pp.210-11.

[299] Letter from Jung to Joyce, 27 September 1932, published in the appendix to Jung's essay "*Ulysses*: A Monologue" (1932), in *The Spirit in Man, Art, and Literature*, in *The Collected Works*, XV, 134. Also quoted, without attribution, in Ellmann, *JJ*, p.642.

[300] Quoted in Ellmann, *JJ*, p.642; his source of information is an interview with Samuel Beckett, 1953.

[301] "James Joyce: Barnacle Goose and Lapwing."

[302] In Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, pp.146, 150, 156-57.

[303] See Beebe, "James Joyce: Barnacle Goose and Lapwing," p.303. For women in the early works, see Benstock, "James Joyce and the Women of the Western World," in *Litters from Aloft: Papers Delivered at the Second Canadian James Joyce Seminar, McMaster University*, ed. Ronald Bates and Harry J. Pollock.

[304] William P. Fitzpatrick suggests that Stephen Dedalus must escape the negative *anima* - his mother, his nation, and his Church - and embrace the positive *anima*, Molly Bloom ("The Myth of Creation: Joyce, Jung, and *Ulysses*"). According to Elliott Coleman, it would be more correct to speak of the influence of *Ulysses* upon Jung's theory of the *anima*, rather than vice versa ("A Note on Joyce and Jung").

[305] Herbert Gorman, *James Joyce: A Definitive Biography*, p.280, n.1. Also quoted in Ellmann, *JJ*, pp.560-61; for another version of the dream, based on information derived from an interview with John Sullivan, 1953, see *JJ*, p.561, n.

[306] The song is given in Ellmann, *JJ*, p.561. Glasheen shows how it is echoed in *Finnegans Wake* ("Molly and *FW*").

[307] *Letters*, III, 142, to Harriet Shaw Weaver, 26 September 1926.

[308] *JJ*, p.576.

[309] *The Sacred River: An Approach to James Joyce*, pp.88, 156. For the concept of the *anima*, see Jung, *Psychological Types*, in *The Collected Works*, VI, 467-69; *Two Essays in Analytical Psychology*, in *The Collected Works*, VII, 188-211; and *Aion*, in *The Collected Works*, XI.2, 13, n.3.

[310] Worthington sees A.L.P. as the Muse, whom Graves calls the

White Goddess ("The Moon and Sidhe: Songs of Isabel," in New Light on Joyce from the Dublin Symposium, ed. Senn, pp.167-68). According to Eckley, Joyce's cosmogony of constant creation is finally expressed in "the imminent union of the potential artist with fecund matter," and this union depends upon a metaphorical sexual relationship between Shem and A.L.P. (in Begnal and Eckley, Narrator and Character in 'Finnegans Wake', pp.156, 163).

[311] According to Butler, female authorship can be determined by "a preponderence of female interest," a knowledge of female things, and the sympathetic portrayal of women, as opposed to the mechanical portrayal of men (The Authoress of the Odyssey: Where and When She Wrote, Who She Was, the Use She Made of the Iliad, and How the Poem Grew under Her Hands, p.105). For Joyce's use of Butler's book, see Kenner, "Homer's Sticks and Stones," pp.293-97.

[312] Graves, The Greek Myths, I, 53 (#13a).

[313] Vico, p.96.

[314] See Allen R. Grossman, Poetic Knowledge in the Early Yeats: A Study of 'The Wind among the Reeds', p.66; and Raine, Yeats, the Tarot and the Golden Dawn, p.30. Discussing the anonymous seventeenth-century alchemical text Instructio de Arbore Solari and its use of the term spiritus mundi ("spirit of the world"), Jung writes that "for an alchemist living in the early part of the seventeenth century, the 'spirit of the world' is a somewhat unusual term, because the expression more commonly used was the 'anima mundi.' The world-soul or, in this case, the world-spirit is a projection of the unconscious" (Aion, in The Collected Works, IX.2, 142).

[315] Yeats, p.250; his emphasis.

[316] Essays and Introductions, p.28.

[317] Quoted in Hart's Introduction to Budgen, p.xvii; the note was written out by Lucie and Paul Léon. My brackets.

[318] "Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses', p.361; see also p.318.

[319] In "Poetry and Tradition" (1907), Yeats writes that "it was our criticism, I think, that set Clarence Mangan at the head of the Young Ireland poets in the place of Davis" (Essays and Introductions, p.256).

[320] The essay first appeared in St. Stephen's, 1 (May 1902), 116-18, as Ellsworth Mason and Richard Ellmann, the editors of The Critical Writings of James Joyce (p.73, n.1), point out.

[321] According to A. P. Sinnett, "consciousness is in indirect relations with the all but infinite memory of Nature, which is preserved with imperishable perfection in the all-embracing medium known to occult science as the Akasa" (The Growth of the Soul, p.216; quoted in Gilbert,

James Joyce's 'Ulysses', p.168).

[322] *James Joyce's Scribbledehobble: The Ur-Workbook for 'Finnegans Wake'*, ed. Connolly, p.104; the note is on p.571 of the Large Notebook. In transcribing part of this note, Hart has misquoted "race memories" for "race memorial" (*Structure and Motif*, p.93).

[323] Joyce made this remark to Dr. O'Brien, who passed it on to Glasheen, who reports it in "Out of My Census," *The Analyst*, No.17 (1959), p.23. I was unable to examine Glasheen's article and have quoted it from Hart, *Structure and Motif*, p.81.

[324] *James Joyce*, pp.168, 175; the second passage is also quoted in Atherton, *Books at the Wake*, p.12. Arland Ussher denies that *Finnegans Wake* is a message from the unconscious (*Three Great Irishmen: Shaw, Yeats, Joyce*, p.140). Begnal thinks that by considering each voice as a character independent of Earwicker, the reader is freed "from the Herculean task of justifying Earwicker's mind as some kind of Jungian unconscious" (in Begnal and Eckley, *Narrator and Character in 'Finnegans Wake'*, p.65).

[325] Power, *From the Old Waterford House* (London: Mellifont, n.d.), p.64; quoted in Ellmann, *JJ*, p.520, and in William T. Noon, S.J., *Joyce and Aquinas*, p.60.

[326] *The Sacred River*, pp.100, 152-54.

[327] *Books at the Wake*, p.18.

[328] *Structure and Motif*, p.80. He also notes that Bloom has fantasies the contents of which are unknown to his unconscious mind. Furthermore, he quotes and disagrees with Ruth von Phul's opinion that "Jerry is the only character in the book possessing both the artist's insight and the almost encyclopedic learning needed to evolve a dream of such fantastic richness" (von Phul, "Who Sleeps at *Finnegans Wake*," p.28). My point is that Shem-Jerry is the part of the mind that transmits the collective memory in dreams.

[329] "James Joyce: Trivial and Quadrivial," p.89.

[330] *Anatomy of Criticism: Four Essays*, p.57. On epic lists, see also Benstock, *Joyce-Again's Wake*, pp.188-90.

[331] Hart, *Structure and Motif*, p.53; his authority is Budgen.

[332] On Bloom's memory, see Adams, *Surface and Symbol: The Consistency of James Joyce's 'Ulysses'*, pp.168-74.

[333] For Snorri Sturlason and the Eddas, see Atherton, *Books at the Wake*, pp.218-23, 283.

[334] Tindall comments on this passage in a similar fashion (*Reader's Guide to 'Finnegans Wake'*, p.36).

[335] For the collective unconscious, see Jung, "The Concept of the Collective Unconscious," in *The Archetypes and the Collective Unconscious*, in *The Collected Works*, IX.1, 42-53.

[336] For a discussion of ἀνάμνησις, see J. A. Stewart, *Plato's Doctrine of Ideas*, pp.192-97.

[337] H. D. Rankin also calls attention to this passage; he thinks that "medears" (348.07) refers to the Platonic Ideas ("Joyce's Remove from Aristotle to Plato," p.12).

[338] Atherton writes of Osiris as the corn-god in *Finnegans Wake*, but he seems to have overlooked this passage (*Books at the Wake*, p.199).

[339] *The Dialogues of Plato*, trans. Jowett, II, 417.

[340] Ibid., p.213.

[341] "A Little Night Lesson: Viconian Structure in *FW* II.2," p.109.

NOTES TO APPENDIX B

[1] Collected Poems 1909-1962, p.92. For a similar interpretation of FW,262.R2, see Joseph Campbell and Henry Morton Robinson, A Skeleton Key to 'Finnegans Wake', p.167; for other references to Gnosticism, see pp.9, 127, 349.

[2] For Marcion, see Hans Jonas, The Gnostic Religion: The Message of the Alien God and the Beginnings of Christianity, pp.137-46 et passim.

[3] Ibid., pp.141-43.

[4] N. A. Weber, "Albigenses," in The Catholic Encyclopedia (1907-12), ed. Charles G. Herbermann et al.

[5] James Webb, The Flight from Reason, pp.185-86; on the subject of Pope Leo XIII's letter, he cites Fabre des Essarts, Les Hiérophantes (Paris, 1905), pp.296-97.

[6] See Denis de Rougemont, Love in the Western World, pp.78ff.; and Ezra Pound, "Psychology and Troubadours: A Divagation from Questions of Technique," Chap.v of The Spirit of Romance, pp.87-100, especially p. 90. Pound's essay was originally published in Quest, 4 (October 1912), 37-53. For discussion of Pound's theory of the troubadours, see: Herbert N. Schneidau, "Pound and Yeats: The Question of Symbolism," pp.227-28; and Stuart Y. McDougal, Ezra Pound and the Troubadour Tradition.

[7] When he uses the word "ophis," Joyce may also have in mind Giambattista Vico's observation that "the serpents of Medusa's head and Mercury's staff signified the dominion of the lands. Hence land rent was called ōpheleia, from ophis, serpent, and was also called the tithe of Hercules" (The New Science of Giambattista Vico, p.189 [par.541]).

[8] Jonas, Gnostic Religion, pp.92-94.

[9] For the view that Joyce prefers Cain over Abel, see Bernard Benstock, Joyce-Again's Wake: An Analysis of 'Finnegans Wake', pp.83-84.

[10] Saint Hippolytus, Bishop of Rome, Refutatio Omnium Haeresium, ed. P. Wendland, Die griechischen christlichen Schriftsteller der ersten drei Jahrhundert, 26 (Berlin, 1916), V.xvi.9f.; quoted in Jonas, Gnostic Religion, pp.94-95.

[11] Jonas, Gnostic Religion, pp.97-98.

[12] F. C. Burkitt, Church and Gnosis: A Study of Christian Thought and Speculation in the Second Century, p.39.

[13] Letters of James Joyce, I, 224-25, to Harriet Shaw Weaver, 1

January 1925.

[14] James Joyce: A Critical Introduction, p.143.

[15] David George Gullette, "Linguistic Dualism in the Works of James Joyce," Dissertation Abstracts, 29 (1969), 4488-A (University of North Carolina at Chapel Hill, 1968).

[16] Jonas, Gnostic Religion, pp.57-58.

[17] "Further Recollections of James Joyce," in James Joyce and the Making of 'Ulysses' and Other Writings, p.352.

[18] "James Joyce," in James Joyce: Two Decades of Criticism, ed. Seon Givens, p.461.

[19] Three Great Irishmen: Shaw, Yeats, Joyce, p.156.

[20] Structure and Motif in 'Finnegans Wake', p.119; see also pp. 124, 126.

[21] "A Touch of Manichaeism," p.9.

[22] Gustav Krüger, "Augustine, Saint," Encyclopaedia Britannica, 11th ed., II, 907.

[23] Jonas, Gnostic Religion, pp.43-44. For further discussion of the demiurge, see Carl Jung, Aion: Researches into the Phenomonology of the Self, in The Collected Works of C. G. Jung, IX.2, 197-98.

[24] Quoted in Richard Ellmann, James Joyce, p.721.

[25] For the alien god, see Jonas, Gnostic Religion, pp.49-51.

[26] According to Michael H. Begnal, H.C.E.'s major speeches are at FW,36.20-.24, 54.20-55.02, 82.21-83.03, 363.20-366.30, and 532.06-554.09 (in Begnal and Grace Eckley, Narrator and Character in 'Finnegans Wake', p.41, n.11).

[27] Jonas, Gnostic Religion, pp.55-56.

[28] For a discussion of the name of H.C.E.'s tavern, see Benstock, Joyce-Again's Wake, pp.32-37.

[29] Gnostic Religion, pp.58-62.

[30] Ibid., p.44.

[31] Ibid., pp.59-62. Jung writes that "gnosis is undoubtedly a psychological knowledge whose contents derive from the unconscious" (Aion, in The Collected Works, IX.2, 223).

[32] Jonas, Gnostic Religion, pp.68-73.

[33] Ibid., pp.80-81.

[34] Mandaische Liturgien, trans. M. Lidzbarski (Berlin, 1920), p. 111; quoted in Jonas, Gnostic Religion, pp.119-20.

[35] For discussion of the Letter, see: Hart, Structure and Motif, pp.200-08, 232-33; and Benstock, Joyce-Again's Wake, pp.8-10 et passim.

[36] Gnostic Religion, pp.174, 176. Jung also discusses Sophia (Aion, in The Collected Works, IX.2, 196-97).

[37] According to Jung, the barbel is the sacred fish of Typhon (Aion, p.122).

[38] "Gnosticism," in Encyclopedia of Religion and Ethics, ed. James Hastings, John A. Selbie, and Louis H. Gray, VI, 236.

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